

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:02  
**First Dose M/F:** NA / NA  
**Lab:** BNW

<b>C Number:</b>	C93026
<b>Lock Date:</b>	05/31/2000
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	08/31/2001

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 680

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40297

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Bronchial
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Heart	Atrium	Thrombosis	Mild
	Valve	Thrombosis	Moderate
	[ Thrombosis TGLS = 1-6 ]		
	[ Thrombosis TGLS = 2-6 ]		
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-4+5 ]		
Lymph Node	Pancreatic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-14 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
		Leukemia Mononuclear	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
	[ Fibrosis TGLS = 6,7-13+14 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:02  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 1	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 680
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40297

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 5-15 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 8-9 ]

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH - Heart Atrium Thrombosis

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 2	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 40298
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Islets, Pancreatic [ Carcinoma TGLS = 5-13 ]		Carcinoma	
* Kidney		Nephropathy	Chronic, Minimal
* Larynx		Foreign Body	Minimal
		Inflammation	Suppurative, Moderate
Mesentery [ Necrosis TGLS = 1-15 ]	Fat	Necrosis	Mild
* Nose		Inflammation	Suppurative, Minimal
* Pituitary Gland [ Adenoma TGLS = 3-10 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Minimal
* Skin [ Fibroma TGLS = 4-16 ]	Subcut Tiss	Fibroma	
* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 3	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 589 <b>HISTO:</b> 40299
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Testes	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Marked
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Clear Cell Focus	Minimal
[ Clear Cell Focus TGLS = 4-14 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Marked
[ Inflammation TGLS = 5-15 ]			

PRIMARY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 4	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 40300
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	Coagulating Gland	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Moderate
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Minimal
[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]			
* Lung	Alveolar Epith Alveolus Alveolus	Hyperplasia Infiltration Cellular Proteinosis	Minimal Histiocyte, Minimal Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Pleura		Inflammation	Chronic, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 5

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40301

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Islets, Pancreatic		Hyperplasia	Mild
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Mixed Cell Focus	Moderate
[ Mixed Cell Focus TGLS = 1-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9+15 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 40302
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Lung	Interstitialium Alveolus	Fibrosis Infiltration Cellular Carcinoma	Minimal Histiocyte, Minimal
* Mammary Gland [ Carcinoma TGLS = 1-15 ]			
* Pituitary Gland [ Adenoma TGLS = 2-10 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Testes [ Adenoma TGLS = 3-14 ]	Interstitial Cell Germinal Epith Interstitial Cell	Adenoma Atrophy Hyperplasia	Moderate Moderate
Tooth	Peridont Tiss	Inflammation	Moderate

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1 <b>DOSE:</b> CONTROL	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 733 <b>HISTO:</b> 40303
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Moderate
[ Hepatodiaphragmatic Nodule TGLS = 4-13 ]			
* Preputial Gland		Hyperplasia	Marked
		Inflammation	Suppurative, Marked
[ Hyperplasia TGLS = 1-15 ]			
[ Inflammation TGLS = 1-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 8

TRT#: 1

SEX: Male

DAY ON TEST: 680

DOSE: CONTROL

DISP: Natural Death

HISTO: 40304

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Bronchial
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

\* Intestine Large, Cecum

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Alveolar/Bronchiolar Adenoma	
Lymph Node	Pancreatic	Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 5-16 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40305

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Kidney		Nephropathy	Chronic, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-13 ]

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40306

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Minimal
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 4-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 11

TRT#: 1

SEX: Male

DAY ON TEST: 614

DOSE: CONTROL

DISP: Natural Death

HISTO: 40307

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Small, Duodenum	* Larynx	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Nose		

OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Islets, Pancreatic		Carcinoma	
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 3-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Marked
* Skin		Basal Cell Adenoma	
[ Basal Cell Adenoma TGLS = 2-14 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 12

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40308

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 13

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40309

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Liver	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Chronic, Minimal
* Larynx		Inflammation	Chronic, Moderate
* Lung	Interstitialium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Moderate
	Bronchiole	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Interstitialium	Inflammation	Chronic, Mild
[ Hyperplasia TGLS = 4-13 ]			
[ Infiltration Cellular TGLS = 4-13 ]			
Lymph Node	Pancreatic	Ectasia	Moderate
* Lymph Node, Mediastinal		Inflammation	Moderate
[ Inflammation TGLS = 2-3 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 3-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Testes	Germinal Epith	Atrophy	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:02

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 13

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 40309

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Interstit Cell

Hyperplasia

Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 14

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40310

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Chronic, Mild
* Larynx		Foreign Body	Mild
		Inflammation	Chronic, Moderate
		Metaplasia	Squamous, Moderate
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 15

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40311

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Clear Cell Focus	Mild
[ Clear Cell Focus TGLS = 4-13 ]			
* Lung	Interstitial	Fibrosis	Moderate
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitial	Inflammation	Chronic, Minimal
	Alveolus	Proteinosis	Mild
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-16 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Mild
* Skin		Hyperkeratosis	Marked
[ Hyperkeratosis TGLS = 1-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:02  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 15

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 40311

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 16

TRT#: 1

SEX: Male

DAY ON TEST: 577

DOSE: CONTROL

DISP: Natural Death

HISTO: 40312

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Liver		Necrosis	Marked
[ Necrosis TGLS = 1-14 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

- Liver Necrosis

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 17

TRT#: 1

SEX: Male

DAY ON TEST: 666

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40313

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Infarct	Marked
		Leukemia Mononuclear	
		Nephropathy	Chronic, Minimal
[ Infarct TGLS = 3,5-7 ]			
* Liver		Hepatodiaphragmatic Nodule	Minimal
		Leukemia Mononuclear	
		Mixed Cell Focus	Mild
[ Hepatodiaphragmatic Nodule TGLS = 4-15 ]			
[ Mixed Cell Focus TGLS = 7-14 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-13 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-16 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 18

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40314

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 19

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40315

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

Harderian Gland		Inflammation	Chronic, Mild
* Kidney		Nephropathy	Chronic, Minimal
* Lung		Hemorrhage	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
[ Hemorrhage TGLS = 1-5 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Schwannoma Malignant	
Note: Lesion is on eyelid, looks like neural crest tumor of pinna.			
[ Schwannoma Malignant TGLS = 3-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 20

TRT#: 1

SEX: Male

DAY ON TEST: 728

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40316

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

AUTO PRECLUDES DIAG.

\* Intestine Small, Ileum

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
	Alveolus	Pigmentation	Minimal
		Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-13 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3,6-14+15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Stomach, Forestomach		Erosion	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:02

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 20

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 728

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 40316

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Erosion TGLS = 7-16 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 4-9 ]

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**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 21

TRT#: 1

SEX: Male

DAY ON TEST: 688

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40317

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-3 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 22

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40318

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Mixed Cell Focus	Mild
[ Mixed Cell Focus TGLS = 4-13 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-16 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-15 ]			
Pleura		Inflammation	Chronic, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 23

TRT#: 1

SEX: Male

DAY ON TEST: 638

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40319

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Islets, Pancreatic	* Larynx	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Intestine Small, Jejunum	Peyers Patch	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-16 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Cyst	Minimal
[ Cyst TGLS = 5-15 ]		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-17 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2,3-13+14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 24

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40320

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Lung	Alveolus	Proteinosis	Minimal
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 25

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40321

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung	Interstitialium	Inflammation	Chronic, Mild
		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
* Skin		Cyst	Moderate
[ Cyst TGLS = 1-15 ]			
* Spleen		Accessory Spleen	Minimal
		Leukemia Mononuclear	
[ Accessory Spleen TGLS = 4-13 ]			
[ Leukemia Mononuclear TGLS = 3-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 26

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40322

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Heart		Cardiomyopathy	Minimal
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 27

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40323

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 3-13 ]			
* Kidney		Nephropathy	Chronic, Minimal
Note: mesothelioma on capsule of kidney.			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Note: mesothelioma adjacent to lung on slide 5 interpreted as floater.			
Mesentery		Mesothelioma Malignant	
		Necrosis	Marked
[ Necrosis TGLS = 2-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
	Bilateral	Mesothelioma Malignant	
[ Adenoma TGLS = 4,5-9 ]			
[ Mesothelioma Malignant TGLS = 3-13 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Marked
[ Adenoma TGLS = 1-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 28

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40324

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
Lymph Node	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla [ Pheochromocytoma Malignant TGLS = 2-7 ]	Pheochromocytoma Malignant	
* Kidney	Nephropathy	Chronic, Mild
* Liver	Leukemia Mononuclear	
* Lung	Alveolar/Bronchiolar Carcinoma	
	Leukemia Mononuclear	
* Lymph Node, Mediastinal	Leukemia Mononuclear	
* Skin [ Squamous Cell Papilloma TGLS = 4-15 ]	Squamous Cell Papilloma	
* Spleen [ Leukemia Mononuclear TGLS = 1-13 ]	Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 3-9 ]	Bilateral, Interstit Cell	Adenoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 29

TRT#: 1

SEX: Male

DAY ON TEST: 700

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40325

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Heart	Atrium	Thrombosis	Moderate
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Minimal
	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 7-6 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-4 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 5-15 ]		
* Nose		Foreign Body	
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
	Respirat Epith	Necrosis	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Skin		Cyst	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:02

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 29

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 700

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 40325

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Cyst TGLS = 1-16 ]

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 6-13 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 4-9 ]

\* Thyroid Gland

C Cell

Hyperplasia

Mild

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 30

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40326

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Pelvis, Transit Epithe	Carcinoma	
		Nephropathy	Chronic, Marked
[ Carcinoma TGLS = 5-15+16 ]			
* Liver		Hepatodiaphragmatic Nodule	Moderate
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 4-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-9+17 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 31

TRT#: 1

SEX: Male

DAY ON TEST: 387

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40327

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Adrenal Medulla        | Blood Vessel               | * Bone                    |
| * Bone Marrow               | * Brain                  | * Epididymis               | * Esophagus               |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Kidney                    | * Larynx                 | * Liver                    | * Lung                    |
| * Lymph Node, Mediastinal   | * Lymph Node, Mesenteric | * Mammary Gland            | * Nose                    |
| * Pancreas                  | * Parathyroid Gland      | * Preputial Gland          | * Prostate                |
| * Salivary Glands           | * Seminal Vesicle        | * Spleen                   | * Stomach, Forestomach    |
| * Stomach, Glandular        | * Testes                 | * Thymus                   | * Thyroid Gland           |
| * Trachea                   | * Urinary Bladder        |                            |                           |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |                   |  |              |                     |
|-------------------|--|--------------|---------------------|
| * Pituitary Gland | Pars Distalis                          | Hyperplasia  | Moderate            |
| * Skin            | Subcut Tiss                            | Fibrosarcoma |                     |
|                   | Subcut Tiss                            | Inflammation | Suppurative, Marked |
|                   | [ Fibrosarcoma TGLS = 2-13 ]           |              |                     |
|                   | [ Inflammation TGLS = 1,2,3-13+14+15 ] |              |                     |

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Inflammation

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 32

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40328

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Nose	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear Regeneration	Moderate
[ Leukemia Mononuclear TGLS = 6-6 ]	Hepatocyte		
* Lung	Interstitialium Alveolar Epith	Fibrosis Hyperplasia Leukemia Mononuclear Leukemia Mononuclear	Minimal Mild
* Lymph Node, Mediastinal			
[ Leukemia Mononuclear TGLS = 1-16 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10-8 ]			
* Pancreas	Acinus	Atrophy	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 8,9-13 ]			
* Spleen		Leukemia Mononuclear Necrosis	Marked
[ Leukemia Mononuclear TGLS = 3,4-14+15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:02  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 32	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 734
	<b>DOSE:</b> CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 40328

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Necrosis TGLS = 5-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 7-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 33

TRT#: 1

SEX: Male

DAY ON TEST: 694

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40329

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	Coagulating Gland	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Adrenal Medulla	* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 34

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40330

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Mild
Pleura		Inflammation	Chronic, Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-14 ]			
* Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	Interstitial Cell	Hyperplasia	Mild
[ Adenoma TGLS = 3-9 ]			
[ Atrophy TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 35

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40331

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
[ Pheochromocytoma Benign TGLS = 3-7 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 1-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 36

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40332

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	Coagulating Gland	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Degeneration	Cystic, Mild
[ Degeneration TGLS = 3-13 ]			
* Lung	Interstitial	Fibrosis	Marked
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitial	Inflammation	Chronic, Minimal
	Alveolus	Proteinosis	Mild
Note: focal dense fibrosis in azygous lobe on slide 4.			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 37

TRT#: 1

SEX: Male

DAY ON TEST: 628

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40333

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Minimal
[ Hepatodiaphragmatic Nodule TGLS = 4-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
		Hemorrhage	Marked
[ Adenoma TGLS = 3-10 ]			
[ Hemorrhage TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 38

TRT#: 1

SEX: Male

DAY ON TEST: 581

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40334

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Pituitary Gland		Cyst	Moderate
* Spleen		Fibrosis	Moderate
[ Fibrosis TGLS = 3-13 ]			
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Moderate
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Adenoma	
[ Adenoma TGLS = 1-3 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Cyst

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 39

TRT#: 1

SEX: Male

DAY ON TEST: 561

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40335

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Brain		Hemorrhage	Moderate
* Kidney		Nephropathy	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 40

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40336

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 4-15 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolar Epith	Hyperplasia	Marked
	Alveolus	Infiltration Cellular	Histiocyte, Mild
[ Hyperplasia TGLS = 1-13 ]			
Pleura		Inflammation	Chronic, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 41

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40337

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney		Nephropathy	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Skin	Pinna	Neural Crest Tumor	
	[ Neural Crest Tumor TGLS = 1-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 2,3-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 42

TRT#: 1

SEX: Male

DAY ON TEST: 421

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40338

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla          | Blood Vessel              | * Bone Marrow               |
| * Brain                  | * Epididymis               | * Esophagus               | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Kidney                  | * Larynx                    |
| * Liver                  | * Lung                     | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric    |
| * Mammary Gland          | * Nose                     | * Pancreas                | * Parathyroid Gland         |
| * Pituitary Gland        | * Preputial Gland          | * Prostate                | * Salivary Glands           |
| * Seminal Vesicle        | * Skin                     | * Spleen                  | * Stomach, Forestomach      |
| * Stomach, Glandular     | * Thymus                   | * Thyroid Gland           | * Trachea                   |
| * Urinary Bladder        |                            |                           |                             |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |   |                |             |        |
|---|----------------|-------------|--------|
| * Bone<br>[ Fracture TGLS = 2-13 ]                | Vertebra       | Fracture    | Marked |
| * Islets, Pancreatic<br>[ Carcinoma TGLS = 1-14 ] |                | Carcinoma   |        |
| * Testes  | Interstit Cell | Hyperplasia | Mild   |

PRIMARY CAUSE OF DEATH

- Bone Vertebra Fracture

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 43

TRT#: 1

SEX: Male

DAY ON TEST: 561

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40339

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet Nephropathy Necrosis	Mild Chronic, Moderate Moderate
Mesentery [ Necrosis TGLS = 2-13 ]			
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 44

TRT#: 1

SEX: Male

DAY ON TEST: 658

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40340

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung	Interstitial	Fibrosis	Minimal
		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Moderate
[ Inflammation TGLS = 6-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 45

TRT#: 1

SEX: Male

DAY ON TEST: 733

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40341

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitial	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolar Epith	Metaplasia	Squamous, Mild
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Adenoma	
[ Adenoma TGLS = 1-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Moderate
	Interstitial Cell	Hyperplasia	Marked
[ Adenoma TGLS = 4-9 ]			
[ Atrophy TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:02  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 45

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 40341

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 46

TRT#: 1

SEX: Male

DAY ON TEST: 638

DOSE: CONTROL

DISP: Natural Death

HISTO: 40342

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Brain		Hemorrhage	Minimal
* Kidney		Nephropathy	Chronic, Marked
* Liver		Hepatodiaphragmatic Nodule	
[ Hepatodiaphragmatic Nodule TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Testes	Germinal Epith	Atrophy	Moderate

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 47

TRT#: 1

SEX: Male

DAY ON TEST: 694

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40343

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-6 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-4+5 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-17 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 4-16 ]			
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
[ Fibrosis TGLS = 6,7-14+15 ]			
[ Leukemia Mononuclear TGLS = 5-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:02  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 47

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 694

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 40343

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 48

TRT#: 1

SEX: Male

DAY ON TEST: 706

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40344

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign Pheochromocytoma Malignant	
* Kidney		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear Regeneration	Marked
[ Leukemia Mononuclear TGLS = 5-15 ]	Hepatocyte		
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-13 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-8 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-16 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:02

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 48

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 706

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 40344

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 49

TRT#: 1

SEX: Male

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40345

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Marked
[ Cardiomyopathy TGLS = 4-14 ]			
* Kidney	Cortex, Renal Tubule	Adenoma	Moderate
	Cortex, Renal Tubule	Atypia Cellular	Minimal
	Pelvis, Transit Epithe	Hyperplasia	Suppurative, Mild
	Pelvis	Inflammation	Chronic, Minimal
		Nephropathy	
Note: Location and cellular appearance of tubular adenoma are different from those seen in treated rats. Step xs: extends into papilla.			
* Lung	Interstitium	Inflammation	Chronic, Mild
* Prostate		Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
* Skin	Subcut Tiss	Fibrosarcoma	
[ Fibrosarcoma TGLS = 1-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 50

TRT#: 1

SEX: Male

DAY ON TEST: 572

DOSE: CONTROL

DISP: Natural Death

HISTO: 40346

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                        |                           |                          |                   |
|------------------------|---------------------------|--------------------------|-------------------|
| * Adrenal Cortex       | * Adrenal Medulla         | Blood Vessel             | * Bone            |
| * Bone Marrow          | * Brain                   | * Epididymis             | * Esophagus       |
| * Heart                | * Islets, Pancreatic      | * Larynx                 | * Liver           |
| * Lung                 | * Lymph Node, Mediastinal | * Lymph Node, Mesenteric | * Mammary Gland   |
| * Nose                 | * Pancreas                | * Parathyroid Gland      | * Preputial Gland |
| * Prostate             | * Salivary Glands         | * Seminal Vesicle        | * Spleen          |
| * Stomach, Forestomach | * Stomach, Glandular      | * Testes                 | * Thymus          |
| * Thyroid Gland        | * Trachea                 | * Urinary Bladder        |                   |

AUTO PRECLUDES DIAG.

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Lymph Node, Bronchial   | * Lymph Node, Mandibular    |

OBSERVATIONS

- |                                |               |                |                  |
|--------------------------------|---------------|----------------|------------------|
| * Kidney                       |               | Nephropathy    | Chronic, Minimal |
| * Pituitary Gland              | Pars Distalis | Adenoma        |                  |
| [ Adenoma TGLS = 3-10 ]        |               |                |                  |
| * Skin                         |               | Cyst           | Moderate         |
| [ Cyst TGLS = 1-14 ]           |               | Hyperkeratosis | Moderate         |
| [ Hyperkeratosis TGLS = 2-13 ] |               |                |                  |

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 201

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 670

HISTO: 40617

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Small, Jejunum
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OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy Leukemia Mononuclear	Moderate Chronic, Moderate
* Liver			
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung	Alveolar Epith Alveolus	Hyperplasia Infiltration Cellular Leukemia Mononuclear Proteinosis	Mild Histiocyte, Mild
	Alveolus		Mild
Note: keratin in lung section 16 is interpreted as a floater.			
[ Infiltration Cellular TGLS = 9-16 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Skin		Basal Cell Adenoma Keratoacanthoma Ulcer	Marked
[ Basal Cell Adenoma TGLS = 8-13 ]			
[ Keratoacanthoma TGLS = 2,3-14+15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:02

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 201

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 670

**DOSE:** 25 PPM

**DISP:** Natural Death

**HISTO:** 40617

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Ulcer TGLS = 8-13 ]

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 6-17 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 4-9 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Skin Ulcer

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Animal Note: TGL 5 = No Corresponding Lesion (NCL)

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 202

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40618

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Pelvis, Transit Epithe Papilla	Hyperplasia Hyperplasia Mineralization Nephropathy Adenoma	Mild Minimal Marked Chronic, Mild
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis		
* Prostate		Inflammation	Suppurative, Mild
* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 203

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 673

HISTO: 40619

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	Mesentery	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolar Epith Alveolus	Hyperplasia Infiltration Cellular	Minimal Histiocyte, Minimal
[ Hyperplasia TGLS = 5-13 ] [ Infiltration Cellular TGLS = 5-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 2-17 ]			
* Testes	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Marked
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 204

TRT#: 3

SEX: Male

DAY ON TEST: 532

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40620

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	Lymph Node	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Adrenal Medulla	* Lymph Node, Bronchial	* Lymph Node, Mandibular	
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Minimal Moderate Chronic, Minimal
Note: see arrow; focus of hyperplasia in cortex.			
* Liver		Hepatodiaphragmatic Nodule	Mild
[ Hepatodiaphragmatic Nodule TGLS = 3-16 ]			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-13+14+15 ]			
* Testes	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Minimal
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Fibroma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 205

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40621

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Mild
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Moderate
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-8 ]			
* Nose		Foreign Body	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Fibrosis	Moderate
[ Fibrosis TGLS = 3-14 ]			
* Spleen		Hemorrhage	Marked
[ Hemorrhage TGLS = 2-13 ]		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:02

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 205

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40621

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Carcinoma

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:02

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 206

TRT#: 3

SEX: Male

DAY ON TEST: 638

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40622

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet Nephropathy	Marked Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-13 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Marked
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 207

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40623

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule	Hyperplasia	Marked
	Pelvis, Transit Epithe	Hyperplasia	Moderate
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Marked

Note: Several solid masses (see arrows), largest called tubular adenoma, smaller ones called 4+ hyperplasia.

[ Nephropathy TGLS = 4-7 ]

Mesentery	Fat	Necrosis	Moderate
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[ Necrosis TGLS = 3-15 ]

* Pituitary Gland	Pars Distalis	Adenoma	
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[ Adenoma TGLS = 1-10 ]

* Prostate		Inflammation	Suppurative, Minimal
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* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate

[ Adenoma TGLS = 2-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 208

TRT#: 3

SEX: Male

DAY ON TEST: 315

DOSE: 25 PPM

DISP: Natural Death

HISTO: 40624

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Bone Marrow
- \* Heart
- \* Lymph Node, Mesenteric
- \* Pituitary Gland
- \* Skin
- \* Thymus

- \* Adrenal Medulla
- \* Brain
- \* Islets, Pancreatic
- \* Mammary Gland
- \* Preputial Gland
- \* Stomach, Forestomach
- \* Thyroid Gland

- Blood Vessel
- \* Epididymis
- \* Larynx
- \* Pancreas
- \* Salivary Glands
- \* Stomach, Glandular
- \* Trachea

- \* Bone
- \* Esophagus
- \* Lymph Node, Mediastinal
- \* Parathyroid Gland
- \* Seminal Vesicle
- \* Testes

MISSING

- \* Lymph Node, Bronchial

- \* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

- \* Intestine Large, Cecum
- \* Intestine Small, Ileum

- \* Intestine Large, Colon
- \* Intestine Small, Jejunum

- \* Intestine Large, Rectum
- \* Nose

- \* Intestine Small, Duodenum
- \* Urinary Bladder

OBSERVATIONS

- \* Kidney
- \* Liver
- \* Lung
- \* Prostate
- \* Spleen

Papilla

- Mineralization
- Nephropathy
- Leukemia Mononuclear
- Leukemia Mononuclear
- Inflammation
- Hemorrhage
- Leukemia Mononuclear

Mild  
Chronic, Mild

Suppurative, Marked  
Marked

[ Hemorrhage TGLS = 2-13+14 ]

PRIMARY CAUSE OF DEATH

- Spleen Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:02

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 209

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40625

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Moderate
* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Chronic, Marked
[ Nephropathy TGLS = 3-7 ]			
* Liver		Leukemia Mononuclear	
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Interstitial	Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Mild
[ Infiltration Cellular TGLS = 4-5 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Preputial Gland		Inflammation	Suppurative, Marked
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 209

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40625

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 5-9 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 210

TRT#: 3

SEX: Male

DAY ON TEST: 694

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40626

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy Leukemia Mononuclear	Moderate Mild Chronic, Mild
* Liver			
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung	Interstitialium Alveolus	Fibrosis Infiltration Cellular Leukemia Mononuclear Leukemia Mononuclear	Mild Histiocyte, Mild
Lymph Node	Pancreatic		
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-4 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-8 ]			
* Nose		Foreign Body Inflammation	Moderate Suppurative, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 210

**TRT#:** 3

**DOSE:** 25 PPM

**SEX:** Male

**DISP:** Moribund Sacrifice

**DAY ON TEST:** 694

**HISTO:** 40626

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 2-13 ]		Leukemia Mononuclear	
* Stomach, Forestomach		Ulcer	Moderate
* Testes	Interstit Cell	Hyperplasia	Mild
* Thyroid Gland	C Cell	Adenoma	

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 211

TRT#: 3

SEX: Male

DAY ON TEST: 725

DOSE: 25 PPM

DISP: Natural Death

HISTO: 40627

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Small, Ileum
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Hyperplasia	Marked
* Kidney	Cortex, Renal Tubule	Adenoma	
	Cortex, Renal Tubule	Hyperplasia	Marked
	Pelvis, Transit Epithe	Hyperplasia	Minimal
	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Marked
[ Nephropathy TGLS = 5-7 ]			
* Larynx		Foreign Body	Moderate
		Inflammation	Suppurative, Marked
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Mammary Gland		Galactoceles	Moderate
[ Galactoceles TGLS = 1-13 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 211

**TRT#:** 3

**DOSE:** 25 PPM

**SEX:** Male

**DISP:** Natural Death

**DAY ON TEST:** 725

**HISTO:** 40627

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate		Inflammation	Suppurative, Marked
* Testes	Interstit Cell	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Adenoma	
[ Adenoma TGLS = 3-3 ]			

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**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 212

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40628

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Minimal Marked Chronic, Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-8 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3,4-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 213

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 708

HISTO: 40629

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Islets, Pancreatic		Adenoma	
* Kidney	Papilla	Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Chronic, Minimal
[ Leukemia Mononuclear TGLS = 7-13 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-17 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10-18 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 8-10 ]			
* Spleen		Leukemia Mononuclear	
		Necrosis	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 213	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 708
	<b>DOSE:</b> 25 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40629

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 2,3-14+15 ]		
[ Necrosis TGLS = 9-16 ]		
* Stomach, Forestomach	Ulcer	Minimal
[ Ulcer TGLS = 11-20 ]		
* Stomach, Glandular	Erosion	Moderate
[ Erosion TGLS = 12-19 ]		
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 5-9 ]		

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 214

TRT#: 3

SEX: Male

DAY ON TEST: 644

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40630

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Cortex, Renal Tubule  Papilla	Accumulation, Hyaline Droplet Adenoma Histiocytic Sarcoma Mineralization Nephropathy	Marked  Metastatic (Skeletal Muscle) Mild Chronic, Minimal
Note: Hyaline droplets in kidney may be assoc with histiocytic sarcoma as well as decalin.			
* Liver		Histiocytic Sarcoma	Metastatic (Skeletal Muscle)
[ Histiocytic Sarcoma TGLS = 2-6 ]			
* Lung		Histiocytic Sarcoma	Metastatic (Skeletal Muscle)
* Lymph Node, Mesenteric		Histiocytic Sarcoma	Metastatic (Skeletal Muscle)
Skeletal Muscle		Histiocytic Sarcoma	
[ Histiocytic Sarcoma TGLS = 1-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH - Skeletal Muscle Histiocytic Sarcoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 215

TRT#: 3

SEX: Male

DAY ON TEST: 581

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40631

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

OBSERVATIONS

* Kidney		Hydronephrosis	Mild
	Pelvis, Transit Epithe	Hyperplasia	Mild
[ Hydronephrosis TGLS = 7-7 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-6 ]			
* Lung	Alveolus	Carcinoma	Metastatic (Urinary Bladder)
		Infiltration Cellular	Histiocyte, Minimal
		Inflammation	Suppurative, Minimal
[ Carcinoma TGLS = 10-19 ]			
* Lymph Node, Mesenteric		Carcinoma	Metastatic (Urinary Bladder)
[ Carcinoma TGLS = 3-13+8 ]			
Mesentery		Carcinoma	Metastatic (Urinary Bladder)
[ Carcinoma TGLS = 6-15 ]			
* Prostate		Carcinoma	Metastatic (Urinary Bladder)
[ Carcinoma TGLS = 5-16 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-20 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 8,11-9 ]			
* Urinary Bladder	Transit Epithe	Carcinoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 215

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 581

**DOSE:** 25 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40631

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Carcinoma TGLS = 5-16+17 ]

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**PRIMARY CAUSE OF DEATH**

- Urinary Bladder Transit Epithe Carcinoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 216

TRT#: 3

SEX: Male

DAY ON TEST: 688

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40632

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Epididymis		Mesothelioma Malignant	
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Liver		Necrosis	Marked
[ Necrosis TGLS = 8-13 ]			
* Lung			
Note: mesothelioma on caudal surface of lung section is interpreted as being present on parietal peritoneum covering diaphragm.			
Mesentery		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 4,5-17+20 ]			
Oral Mucosa	Pharyngeal	Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 9-12 ]			
Peritoneum		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 1,2,3-15+16+18 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
		Mesothelioma Malignant	
[ Adenoma TGLS = 7-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 216

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 688

**DOSE:** 25 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40632

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Peritoneum Mesothelioma Malignant

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 217

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 722

HISTO: 40633

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Islets, Pancreatic		Adenoma	
[ Adenoma TGLS = 6-15 ]			
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 5-14 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Nose		Foreign Body	Moderate
	Goblet Cell	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 1-13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 217	<b>TRT#:</b> 3 <b>DOSE:</b> 25 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 722 <b>HISTO:</b> 40633
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 4-16 ]		Leukemia Mononuclear	
* Testes [ Adenoma TGLS = 3-9 ]	Interstit Cell Germinal Epith Interstit Cell	Adenoma Atrophy Hyperplasia	Marked Mild

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 218

TRT#: 3

SEX: Male

DAY ON TEST: 701

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40634

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Mild
	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Mild
	Alveolar Epith	Metaplasia	Squamous, Mild
	Alveolus	Proteinosis	Mild
[ Fibrosis TGLS = 6-13 ]			
[ Metaplasia TGLS = 6-13 ]			
* Lymph Node, Mediastinal		Angiectasis	Moderate
[ Angiectasis TGLS = 3-3 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 6-13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 218

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 701

**DOSE:** 25 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40634

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate		Inflammation	Suppurative, Mild
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Moderate
	Interstit Cell	Hyperplasia	Minimal

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[ Adenoma TGLS = 5-9 ]

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**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 219

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40635

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Necrosis	Marked
		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Moderate
* Kidney	Cortex, Renal Tubule	Hyperplasia	Marked
	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Moderate
Note: see arrow; marked tubular hyperplasia.			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Necrosis	Moderate
Mesentery			
[ Necrosis TGLS = 3-16 ]			
* Pancreas	Acinus	Atrophy	Moderate
Pleura		Inflammation	Chronic, Mild
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 1-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9+14 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 219

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40635

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 220

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40636

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy Clear Cell Focus	Mild Marked Chronic, Moderate Mild
* Liver [ Clear Cell Focus TGLS = 3-6 ]			
* Mammary Gland [ Galactoceles TGLS = 1-14 ] [ Hyperplasia TGLS = 1-14 ]	Epithelium	Galactoceles Hyperplasia	Moderate Marked
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 221

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40637

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Lymph Node, Mesenteric	Mesentery
* Nose	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
[ Pheochromocytoma Benign TGLS = 12-7 ]			
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 8-13 ]			
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Mild
	Bilateral, Renal Tubule	Carcinoma	
	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Marked
Note: Impossible to tell if renal tumor mass in R kidney on slide 16 is arising from or invading trans epith lining pelvis. Interpreted as invasion.			
[ Carcinoma TGLS = 5,6,11-15+16+17+7 ]			
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 9-14 ]			
* Lung		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 7-4+5 ]			
Lymph Node	Deep Cervical	Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 4-20 ]			
* Lymph Node, Mediastinal		Carcinoma	Metastatic (Kidney)
* Mammary Gland		Carcinoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 221

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40637

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: Interpreted as mammary ca at multiple sites, impossible to code as such.

[ Carcinoma TGLS = 1,2-21+19 ]

Oral Mucosa	Pharyngeal	Hyperplasia	Squamous, Moderate
* Pancreas		Carcinoma	Metastatic (Kidney)
[ Carcinoma TGLS = 8-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 10-10 ]			
* Prostate		Inflammation	Suppurative, Moderate
* Seminal Vesicle		Carcinoma	Metastatic (Kidney)
* Skin		Cyst	Moderate
[ Cyst TGLS = 3-18 ]			
* Spleen	Capsule	Carcinoma	Metastatic (Kidney)
		Leukemia Mononuclear	
* Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 222

TRT#: 3

SEX: Male

DAY ON TEST: 538

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40638

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
Penis	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Carcinoma Hemorrhage	Metastatic (Pituitary Gland) Marked
[ Carcinoma TGLS = 7-1+10 ]			
Eye	Antr Chamber	Carcinoma Hemorrhage Inflammation	Metastatic (Pituitary Gland) Marked Suppurative, Marked
[ Hemorrhage TGLS = 5-13 ]			
[ Inflammation TGLS = 5-13 ]			
* Lung	Interstitium	Fibrosis	Mild
[ Fibrosis TGLS = 4-14 ]			
Penis			
Note: Slide 15 is seminal plug			
* Pituitary Gland	Pars Distalis Craniophar Dct Pars Distalis	Adenoma Craniopharyngioma Hyperplasia	Moderate
[ Craniopharyngioma TGLS = 8-17+10 ]			
Pleura		Inflammation	Chronic, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 222	<b>TRT#:</b> 3 <b>DOSE:</b> 25 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 538 <b>HISTO:</b> 40638
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Inflammation TGLS = 4-14 ]

\* Testes

Interstit Cell  
Interstit Cell

Adenoma  
Hyperplasia

Minimal

[ Adenoma TGLS = 6-9 ]

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PRIMARY CAUSE OF DEATH	- Pituitary Gland Craniophar Dct Craniopharyngioma
CONTRIBUTORY CAUSE OF DEATH	- Brain Hemorrhage

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 223

TRT#: 3

SEX: Male

DAY ON TEST: 638

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40639

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Heart	Atrium	Thrombosis	Marked
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
	Hepatocyte	Regeneration	Marked
		Thrombosis	Marked
[ Regeneration TGLS = 6-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-4 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Carcinoma	
[ Carcinoma TGLS = 2-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 223

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 638

**DOSE:** 25 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40639

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Preputial Gland Carcinoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 224

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40640

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Moderate
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 3-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
Tongue		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 1-14 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 225

TRT#: 3

SEX: Male

DAY ON TEST: 722

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40641

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Preputial Gland
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Kidney	Cortex, Renal Tubule	Hyperplasia	Minimal
		Nephropathy	Chronic, Marked
* Liver		Vacuolization Cytoplasmic	Moderate
* Lymph Node, Mediastinal		Angiectasis	Marked
[ Angiectasis TGLS = 2-3 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 4-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-10 ]			
* Prostate		Hyperplasia	Mild
		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 226

TRT#: 3

SEX: Male

DAY ON TEST: 652

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40642

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

OBSERVATIONS

* Kidney	Cortex, Renal Tubule Pelvis, Transit Epithe Papilla	Accumulation, Hyaline Droplet Hyperplasia Mineralization Nephropathy Leukemia Mononuclear	Minimal Minimal Minimal Chronic, Mild
* Liver			
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung	Interstitialium Alveolus	Fibrosis Infiltration Cellular Leukemia Mononuclear	Minimal Histiocyte, Minimal
[ Leukemia Mononuclear TGLS = 1-4+5 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-15 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Hemorrhage Leukemia Mononuclear	Marked
[ Hemorrhage TGLS = 4-14 ]			
[ Leukemia Mononuclear TGLS = 3-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 226

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 652

**DOSE:** 25 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40642

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Hyperplasia

Moderate

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 227

TRT#: 3

SEX: Male

DAY ON TEST: 592

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40643

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Brain		Compression	Marked
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Mild
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Bronchiole	Metaplasia	Squamous, Marked
[ Infiltration Cellular TGLS = 2-14 ]			
[ Metaplasia TGLS = 1-13 ]			
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 4-15 ]			
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 228

TRT#: 3

SEX: Male

DAY ON TEST: 561

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40644

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-13 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-16 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-15 ]			
* Testes	Interstit Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 229

TRT#: 3

SEX: Male

DAY ON TEST: 708

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40645

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Epididymis		Mesothelioma Malignant	
* Heart	Pericardium	Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2,3-16 ]			
* Kidney	Cortex, Renal Tubule	Hyperplasia	Mild
		Nephropathy	Chronic, Moderate
* Lung	Mediastinum	Mesothelioma Malignant	
Peritoneum		Mesothelioma Malignant	
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura		Mesothelioma Malignant	
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-13+14+15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
		Mesothelioma Malignant	
[ Adenoma TGLS = 4-9 ]			

PRIMARY CAUSE OF DEATH

- Heart Pericardium Mesothelioma Malignant

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 230

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40646

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy Fibroadenoma	Minimal Chronic, Marked
* Mammary Gland [ Fibroadenoma TGLS = 2-14 ]			
* Pituitary Gland [ Hyperplasia TGLS = 3-10 ]	Pars Distalis	Hyperplasia	Moderate
* Testes [ Adenoma TGLS = 4-9 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland [ Adenoma TGLS = 1-3 ]	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 231

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40647

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign Polyp Adenomatous	Moderate
* Intestine Large, Colon [ Polyp Adenomatous TGLS = 3-14 ]			
* Kidney	Cortex, Renal Tubule Pelvis, Transit Epithe Papilla	Hyperplasia Hyperplasia Mineralization Nephropathy	Moderate Minimal Mild Chronic, Moderate
Note: arrow on possible adenoma vs severe hyperplasia.			
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Preputial Gland		Hyperplasia	Mild
* Prostate		Inflammation	Suppurative, Mild
* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 232

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40648

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Larynx	Glands	Degeneration	Marked
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 3,4-6 ]		
* Lung	Interstitium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Mild
Pleura	Mesothelium	Hyperplasia	Mild
		Inflammation	Chronic, Mild
* Skin		Hyperplasia	Marked
	[ Hyperplasia TGLS = 1-13 ]		
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 5-9 ]		

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 232

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40648

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 233

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 721

HISTO: 40649

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy	Marked Chronic, Mild
* Liver		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Minimal
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 234

TRT#: 3

SEX: Male

DAY ON TEST: 525

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40650

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lymph Node, Mediastinal		Angiectasis	Marked
[ Angiectasis TGLS = 1-3 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 3-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 2-13+14 ]			
* Testes	Interstit Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

- Skin Keratoacanthoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 235

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 681

HISTO: 40651

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy	Moderate Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-3 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Fibrosis	Marked
[ Fibrosis TGLS = 4-14 ]		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,7-9 ]			

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 236

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40652

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3,8-6 ]			
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitial	Inflammation	Chronic, Minimal
	Alveolus	Proteinosis	Mild
[ Hyperplasia TGLS = 7-4 ]			
* Pituitary Gland		Cyst	Marked
[ Cyst TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 236	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 734
	<b>DOSE:</b> 25 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 40652

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 5,6-9 ]			
* Thymus		Cyst	Mild
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 237

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40653

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Marked
* Kidney		Nephropathy	Chronic, Moderate
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Skin	Subcut Tiss	Fibroma	
	Subcut Tiss	Lipoma	
Note: sq mass is mixture of fatty and fibrous tissue.			
[ Fibroma TGLS = 4-15 ]			
[ Lipoma TGLS = 4-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 238

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40654

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney		Nephropathy	Chronic, Moderate
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 239

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40655

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Kidney	Cortex, Renal Tubule	Hyperplasia	Mild
	Papilla	Mineralization	Minimal
	Pelvis, Transit Epithe	Nephropathy	Chronic, Mild
		Papilloma	
Note: trans cell tumor confined to renal pelvis, minimal extension into muscularis.			
* Liver		Hepatodiaphragmatic Nodule	Moderate
		Leukemia Mononuclear	
		[ Hepatodiaphragmatic Nodule TGLS = 9-15 ]	
		[ Leukemia Mononuclear TGLS = 8-6 ]	
* Lung	Alveolus	Alveolar/Bronchiolar Adenoma	Histiocyte, Marked
		Infiltration Cellular	
		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
		[ Necrosis TGLS = 4-14 ]	
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 3-10 ]	
* Prostate		Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 239

**TRT#:** 3

**DOSE:** 25 PPM

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 733

**HISTO:** 40655

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Skin

[ Basal Cell Adenoma TGLS = 2-13 ]

Inflammation

Basal Cell Adenoma

Suppurative, Moderate

\* Spleen

[ Leukemia Mononuclear TGLS = 7-16 ]

Leukemia Mononuclear

\* Testes

[ Adenoma TGLS = 5,6-9 ]

Bilateral, Interstit Cell

Adenoma

\* Thyroid Gland

C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 240

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40656

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Minimal Minimal Chronic, Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 241

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40657

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Chronic, Moderate
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-16 ]			
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 6-13 ]			
* Skin		Hyperkeratosis	Mild
[ Hyperkeratosis TGLS = 1,2-14+15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5-9 ]			
* Thyroid Gland	C Cell	Carcinoma	
	Follicular Cel	Hyperplasia	Marked
[ Carcinoma TGLS = 3-3 ]			
[ Hyperplasia TGLS = 3-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 241

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40657

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 242

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40658

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Lung	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-9 ]		
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 243

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40659

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Adrenal Medulla		Hyperplasia	Marked
* Heart	Atrium	Thrombosis	Moderate
[ Thrombosis TGLS = 6-6 ]			
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Minimal
* Liver		Vacuolization Cytoplasmic	Marked
Note: centrolobular vacuolation and degeneration secondary to CHF from thrombus in heart.			
[ Vacuolization Cytoplasmic TGLS = 5-6 ]			
* Pancreas	Acinus	Atrophy	Moderate
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Fibrosis	Moderate
* Stomach, Forestomach		Ulcer	Marked
* Stomach, Glandular		Ulcer	Marked
[ Ulcer TGLS = 7-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
[ Adenoma TGLS = 3-9 ]			
[ Atrophy TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 243

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40659

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 244

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 509

HISTO: 40660

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Bone Marrow		Histiocytic Sarcoma	
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Marked
		Histiocytic Sarcoma	Metastatic (Liver)
		Nephropathy	Chronic, Minimal
Note: Hyaline droplets may be assoc with histiocytic sarcoma as well as decalin exposure.			
Note: Hyaline droplets are similar to those seen in female control 120 and high dose 902. Very large droplets.			
* Liver		Histiocytic Sarcoma	
		[ Histiocytic Sarcoma TGLS = 3-13 ]	
* Lung		Histiocytic Sarcoma	Metastatic (Liver)
		[ Histiocytic Sarcoma TGLS = 1-4+5 ]	
Lymph Node	Pancreatic	Histiocytic Sarcoma	
		[ Histiocytic Sarcoma TGLS = 6-15 ]	
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 2-10 ]	
* Spleen		Hematopoietic Cell Proliferation	Marked
		[ Hematopoietic Cell Proliferation TGLS = 4-14 ]	
* Stomach, Forestomach		Ulcer	Marked
		[ Ulcer TGLS = 7-16 ]	
* Testes	Interstit Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 244

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 509

**DOSE:** 25 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40660

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Stomach, Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 245

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40661

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy Necrosis	Minimal Chronic, Mild Moderate
Mesentery [ Necrosis TGLS = 2-14 ]			
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Testes [ Adenoma TGLS = 3,4-9 ]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 246

TRT#: 3

SEX: Male

DAY ON TEST: 567

DOSE: 25 PPM

DISP: Natural Death

HISTO: 40662

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Heart		Cardiomyopathy	Marked
[ Cardiomyopathy TGLS = 5-13 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Lung		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2,3-15+16 ]			
* Testes	Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 247

TRT#: 3

DOSE: 25 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 589

HISTO: 40663

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Mild
		Infarct	Marked
		Nephropathy	Chronic, Marked
		[ Infarct TGLS = 3-17 ]	
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 6-14 ]	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	
		[ Hemorrhage TGLS = 7-13 ]	
		[ Leukemia Mononuclear TGLS = 5-14 ]	
* Stomach, Forestomach		Ulcer	Marked
		[ Ulcer TGLS = 8-15 ]	
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 247	<b>TRT#:</b> 3 <b>DOSE:</b> 25 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 589 <b>HISTO:</b> 40663
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		
CONTRIBUTORY CAUSE OF DEATH	- Stomach;Forestomach Ulcer		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 248

TRT#: 3

SEX: Male

DAY ON TEST: 581

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40664

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

Eye [ Cataract TGLS = 1-13 ]	Lens	Cataract	Marked
* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy	Marked Marked Chronic, Mild
* Liver [ Leukemia Mononuclear TGLS = 5-6 ]		Leukemia Mononuclear	
* Lung Lymph Node [ Leukemia Mononuclear TGLS = 6-14 ]	Pancreatic	Leukemia Mononuclear Leukemia Mononuclear	
* Nose		Foreign Body Inflammation	Mild Suppurative, Minimal
* Prostate		Inflammation	Suppurative, Minimal
* Spleen [ Hemorrhage TGLS = 3-16 ] [ Leukemia Mononuclear TGLS = 2-15 ]		Hemorrhage Leukemia Mononuclear	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 248

**TRT#:** 3  
**DOSE:** 25 PPM

**SEX:** Male  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 581  
**HISTO:** 40664

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 4-9 ]

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 249

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40665

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Minimal Moderate Chronic, Moderate
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Prostate	Ventral	Adenoma Inflammation	Suppurative, Mild
* Testes	Interstit Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 250

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40666

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Adrenal Medulla        | Blood Vessel               | * Bone                    |
| * Bone Marrow               | * Brain                  | * Epididymis               | * Esophagus               |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Larynx                    | * Liver                  | * Lung                     | * Lymph Node, Mesenteric  |
| * Mammary Gland             | * Nose                   | * Pancreas                 | * Parathyroid Gland       |
| * Prostate                  | * Salivary Glands        | * Seminal Vesicle          | * Skin                    |
| * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   | * Thyroid Gland           |
| * Trachea                   | * Urinary Bladder        |                            |                           |

MISSING

- |                         |                          |                           |
|-------------------------|--------------------------|---------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal |
|-------------------------|--------------------------|---------------------------|

OBSERVATIONS

- |  |                           |   |                           |
|--|---------------------------|---|---------------------------|
| * Kidney   | Papilla                   | Mineralization<br>Nephropathy<br>Leukemia Mononuclear | Moderate<br>Chronic, Mild |
| Lymph Node<br>[ Leukemia Mononuclear TGLS = 1-18 ]                           | Deep Cervical             |   |                           |
| * Pituitary Gland  | Pars Distalis             | Adenoma   |                           |
| * Preputial Gland<br>[ Adenoma TGLS = 2-16+17 ]                              |                           | Adenoma   |                           |
| * Spleen<br>[ Fibrosis TGLS = 4-13 ]<br>[ Leukemia Mononuclear TGLS = 3-13 ] |                           | Fibrosis<br>Leukemia Mononuclear                      | Mild                      |
| * Testes<br>[ Adenoma TGLS = 5-9 ]   | Bilateral, Interstit Cell | Adenoma   |                           |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 401

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 617

HISTO: 40567

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
		Pheochromocytoma Benign	
* Brain		Carcinoma	Metastatic (Pituitary Gland)
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Minimal
	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-14 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-4 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-13 ]			
* Nose		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
* Pituitary Gland	Pars Distalis	Carcinoma	
* Spleen		Leukemia Mononuclear	
		Necrosis	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 401	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 617
	<b>DOSE:</b> 50 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40567

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 4-15 ]		
[ Necrosis TGLS = 5-16 ]		
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 6-9 ]		

---

PRIMARY CAUSE OF DEATH	- Spleen	Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Spleen	Necrosis

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 402

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40568

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Minimal Mild Chronic, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Skin		Cyst Epithelial Inclusion	Marked
	[ Cyst Epithelial Inclusion TGLS = 1,2-14+15 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 403

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 716

HISTO: 40569

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	Lacrimal Gland
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney	Cortex, Renal Tubule	Adenoma	
	Cortex, Renal Tubule	Hyperplasia	Minimal
	Pelvis, Transit Epithe	Hyperplasia	Minimal
	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Mild
Note: see arrow in ink ; severe hyperplasia vs adenoma?			
* Larynx	Squam Epithel	Hyperplasia	Mild
		Inflammation	Chronic, Moderate
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Minimal
* Prostate		Inflammation	Suppurative, Mild
* Salivary Glands		Sarcoma	
	[ Sarcoma TGLS = 1-13+14+15+16 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 403

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 716

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40569

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Salivary Glands Sarcoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 404

TRT#: 5

SEX: Male

DAY ON TEST: 605

DOSE: 50 PPM

DISP: Natural Death

HISTO: 40570

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Kidney		Leukemia Mononuclear Nephropathy	Chronic, Minimal
* Liver	Hepatocyte	Leukemia Mononuclear Regeneration	Marked
	[ Leukemia Mononuclear TGLS = 2,3,4-13+14+15 ]		
	[ Regeneration TGLS = 2,3,4-13+14+15 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-18 ]		
* Nose		Foreign Body Inflammation	Mild Suppurative, Moderate
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5,6-16+17 ]		
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
	[ Adenoma TGLS = 8-9 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 404

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 605

**DOSE:** 50 PPM

**DISP:** Natural Death

**HISTO:** 40570

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 405

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 665

HISTO: 40571

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia Leukemia Mononuclear Pheochromocytoma Benign	Mild
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy Leukemia Mononuclear	Mild Marked Chronic, Mild
* Liver			
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10,11-16+17 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-13 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-4 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-15 ]			
Mesentery	Fat	Necrosis	Minimal
[ Necrosis TGLS = 8-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 405	<b>TRT#:</b> 5 <b>DOSE:</b> 50 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 665 <b>HISTO:</b> 40571
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Skin [ Inflammation TGLS = 3-21 ]	Inflammation	Acute, Moderate
* Spleen [ Hemorrhage TGLS = 12-18 ] [ Leukemia Mononuclear TGLS = 5,7-19+20 ]	Hemorrhage Leukemia Mononuclear	Moderate
* Stomach, Forestomach [ Ulcer TGLS = 13-22 ]	Ulcer	Marked
* Testes [ Adenoma TGLS = 4-9 ]	Bilateral, Interstit Cell Adenoma	

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PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Stomach;Forestomach Ulcer

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 406

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 666

HISTO: 40572

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Bone Marrow		Myelofibrosis	Moderate
* Kidney		Glomerulosclerosis	Moderate
		Infarct	Marked
		Nephropathy	Chronic, Marked
[ Infarct TGLS = 7-18 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14+15 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 3-13 ]			
* Spleen		Fibrosis	Marked
		Leukemia Mononuclear	
[ Fibrosis TGLS = 5-17 ]			
[ Leukemia Mononuclear TGLS = 4-16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 406

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 666

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40572

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 2-9 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Kidney Infarct

---

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 407

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40573

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Moderate
* Lung	Interstitialium	Fibrosis	Moderate
		Hemorrhage	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitialium	Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura	Mesothelium	Hyperplasia	Moderate
		Inflammation	Chronic, Mild
[ Hyperplasia TGLS = 2-14 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 408

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40574

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Benign	
* Kidney		Cyst	Marked
	Cortex, Renal Tubule	Hyperplasia	Mild
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
* Liver		Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 6-6 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 4-15 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
		Cyst	Marked
	[ Cyst TGLS = 3-10 ]		
* Spleen		Congestion	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 5-9 ]		
* Thymus		Lymphoma Malignant	
	[ Lymphoma Malignant TGLS = 2-13 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 408

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 50 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40574

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Thyroid Gland

C Cell

Carcinoma

[ Carcinoma TGLS = 1-3 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 409

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40575

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Cyst	Marked
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
* Lung	Interstitial	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Minimal
[ Inflammation TGLS = 4-13 ]			
* Skin	Subcut Tiss	Fibroma	
Note: Diff dx on tgl 1 is fibroplasia.			
Note: correct dx is fibroma of skeletal muscle, not available.			
[ Fibroma TGLS = 1-16 ]			
* Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
[ Adenoma TGLS = 2-14 ]			
[ Atrophy TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 409

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 50 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40575

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 410

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 715

HISTO: 40576

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Heart	Atrium	Thrombosis	
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-16 ]			
[ Leukemia Mononuclear TGLS = 2-15 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-13 ]			
* Prostate		Inflammation	Suppurative, Moderate
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]			
* Stomach, Glandular		Ulcer	Marked
[ Ulcer TGLS = 8-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 410

**TRT#:** 5  
**DOSE:** 50 PPM

**SEX:** Male  
**DISP:** Natural Death

**DAY ON TEST:** 715  
**HISTO:** 40576

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 4-9 ]	Bilateral, Interstit Cell	Adenoma
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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 411

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40577

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	Lacrimal Gland	* Larynx
* Liver	Lymph Node	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Epididymis		Mesothelioma Malignant	
* Kidney		Nephropathy	Chronic, Mild
* Lung	Interstitialium	Fibrosis	Minimal
	Interstitialium	Inflammation	Chronic, Minimal
* Lymph Node, Bronchial		Ectasia	Mild
Peritoneum		Mesothelioma Malignant	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Preputial Gland		Hyperplasia	Mild
* Skin	Subcut Tiss	Fibroma	
		Squamous Cell Papilloma	
[ Fibroma TGLS = 2-15 ]			
[ Squamous Cell Papilloma TGLS = 1-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Moderate
		Mesothelioma Malignant	
[ Adenoma TGLS = 4-9 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 411

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 50 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40577

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Atrophy TGLS = 5-9 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 412

TRT#: 5

SEX: Male

DAY ON TEST: 671

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40578

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy	Marked Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear Neural Crest Tumor	Metastatic (Skin)
Note: small met on slide 13 is from ear tumor; several clumps of more rounded cells in large vessels in slide 4 look like mets but different shape and size. [ Neural Crest Tumor TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Skin	Pinna	Neural Crest Tumor	
[ Neural Crest Tumor TGLS = 5-16 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

Animal Note: TGL 2 = No Corresponding Lesion (NCL)

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 413

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40579

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                           |
|----------------------------|---------------------------|-----------------------------|---------------------------|
| Blood Vessel               | * Bone                    | * Bone Marrow               | * Brain                   |
| * Epididymis               | * Esophagus               | * Heart                     | * Intestine Large, Cecum  |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum  |
| * Intestine Small, Jejunum | * Larynx                  | * Lung                      | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Nose                      | * Pancreas                |
| * Parathyroid Gland        | * Pituitary Gland         | * Preputial Gland           | * Prostate                |
| * Salivary Glands          | * Seminal Vesicle         | * Skin                      | * Stomach, Forestomach    |
| * Stomach, Glandular       | * Thymus                  | * Thyroid Gland             | * Trachea                 |
| * Urinary Bladder          |                           |                             |                           |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |                      |                           |                           |               |
|----------------------|---------------------------|---------------------------|---------------|
| * Adrenal Cortex     |                           | Vacuolization Cytoplasmic | Mild          |
| * Adrenal Medulla    |                           | Hyperplasia               | Mild          |
| * Islets, Pancreatic |                           | Hyperplasia               | Marked        |
| * Kidney             | Papilla                   | Mineralization            | Mild          |
|                      |                           | Nephropathy               | Chronic, Mild |
| * Liver              |                           | Leukemia Mononuclear      |               |
| * Spleen             |                           | Leukemia Mononuclear      |               |
| * Testes             | Bilateral, Interstit Cell | Adenoma                   |               |

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 414

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40580

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
* Liver		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 415

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40581

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Mild
* Kidney	Papilla	Mineralization Nephropathy	Moderate Chronic, Moderate
Note: ten step sections of kidney, no cyst found to confirm tgl.			
* Liver		Hepatodiaphragmatic Nodule Leukemia Mononuclear Mixed Cell Focus	Minimal Mild
[ Hepatodiaphragmatic Nodule TGLS = 6-13 ] [ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Leukemia Mononuclear Fibroadenoma	
* Mammary Gland			
[ Fibroadenoma TGLS = 1-16+17+18+19 ]			
* Nose		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 415	<b>TRT#:</b> 5 <b>DOSE:</b> 50 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 40581
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3-9 ] [ Atrophy TGLS = 4-9 ]	Germinal Epith	Atrophy	Moderate
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**PRIMARY CAUSE OF DEATH** -

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Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 416

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40582

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Cortex, Renal Tubule	Adenoma	
	Pelvis, Transit Epithe	Hyperplasia	Marked
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
[ Adenoma TGLS = 3-14 ]			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-17 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Prostate		Inflammation	Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	Follicular Cel	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 417

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 722

HISTO: 40583

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Kidney		Nephropathy	Chronic, Moderate
* Liver		Leukemia Mononuclear	
	Hepatocyte	Regeneration	Marked
Note: Hyperplasia of pleura on diaphragm adjacent to esophagus on slide 4. Appears to be 2ndary to leuk infiltrate.			
[ Regeneration TGLS = 3-13 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
Pleura	Mesothelium	Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 418

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 688

HISTO: 40584

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Adrenal Medulla		Hyperplasia	Moderate
* Brain		Hemorrhage	Moderate
* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy	Marked Mild Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical Pancreatic	Leukemia Mononuclear Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-13 ]			
[ Leukemia Mononuclear TGLS = 6-14 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-15 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-18 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4,5-16+17 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 418

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 688

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40584

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 3-9 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 419

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40585

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Cortex, Renal Tubule	Adenoma	
	Pelvis, Transit Epithe	Hyperplasia	Minimal
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
[ Adenoma TGLS = 4-14 ]			
Mesentery	Fat	Hemorrhage	Moderate
[ Hemorrhage TGLS = 1-13 ]			
* Pancreas	Acinus	Atrophy	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
	Follicular Cel	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 420

TRT#: 5

SEX: Male

DAY ON TEST: 708

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40586

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Brain		Compression	Mild
* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy Leukemia Mononuclear	Moderate Mild Chronic, Marked
* Liver			
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Lung	Alveolus	Infiltration Cellular Leukemia Mononuclear Leukemia Mononuclear	Histiocyte, Minimal
Lymph Node	Deep Cervical		
[ Leukemia Mononuclear TGLS = 7-17 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild
* Prostate		Inflammation	Suppurative, Moderate
* Skin	Subcut Tiss	Lipoma	
[ Lipoma TGLS = 6-14+15+16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 420

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 708

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40586

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 3-18 ]		Leukemia Mononuclear	
* Stomach, Forestomach		Ulcer	Moderate
* Testes [ Adenoma TGLS = 5-9 ]	Bilateral, Interstit Cell	Adenoma	

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**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 421

TRT#: 5

SEX: Male

DAY ON TEST: 733

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40587

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Kidney	Cortex, Renal Tubule Papilla	Adenoma Mineralization Nephropathy	Moderate Chronic, Moderate
* Larynx		Foreign Body Inflammation	Mild Chronic, Moderate
Lymph Node [ Pigmentation TGLS = 3-6 ]	Pancreatic	Pigmentation	Marked
* Pituitary Gland [ Adenoma TGLS = 4-10 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Minimal
* Testes [ Adenoma TGLS = 1-9 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland Tongue [ Squamous Cell Papilloma TGLS = 2-14 ]	C Cell	Adenoma Inflammation Squamous Cell Papilloma	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 421

**TRT#:** 5

**DOSE:** 50 PPM

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 733

**HISTO:** 40587

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 422

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40588

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	Coagulating Gland	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Moderate
* Kidney	Papilla	Mineralization Nephropathy Cyst	Marked Chronic, Marked Marked
* Liver [ Cyst TGLS = 4-6 ]			
* Lung	Interstitialium Alveolar Epith Alveolus Alveolus	Fibrosis Hyperplasia Infiltration Cellular Proteinosis	Minimal Moderate Histiocyte, Minimal Minimal
Lymph Node [ Infiltration Cellular TGLS = 1-15 ]	Deep Cervical	Infiltration Cellular	Histiocyte, Moderate
Mesentery [ Hemorrhage TGLS = 2-14 ]	Fat	Hemorrhage	Moderate
* Pituitary Gland [ Adenoma TGLS = 5-10 ]	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 422

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 50 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40588

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3,6-9 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 423

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40589

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Heart	Atrium	Thrombosis	Mild
* Kidney		Nephropathy	Chronic, Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung		Hemorrhage	Minimal
	Alveolar Epith	Hyperplasia	Moderate
[ Hyperplasia TGLS = 10-13 ]		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-15 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-16 ]			
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 423	<b>TRT#:</b> 5 <b>DOSE:</b> 50 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 734 <b>HISTO:</b> 40589
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 8-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 424

TRT#: 5

SEX: Male

DAY ON TEST: 602

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40590

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Marked
* Heart	Atrium	Thrombosis	Moderate
* Intestine Large, Colon		Ulcer	Moderate
* Kidney	Papilla	Mineralization Nephropathy	Mild Chronic, Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung	Interstitialium Alveolar Epith	Fibrosis Hyperplasia Leukemia Mononuclear	Mild Mild
Note: tgl 1 appears to be a developmental anomaly or malformation, e.g., hamartoma. DX not available.			
[ Fibrosis TGLS = 1-13 ]			
[ Hyperplasia TGLS = 1-13 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 4-15 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 424

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 602

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40590

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Stomach, Glandular  
[ Ulcer TGLS = 6-16 ]

Ulcer

Marked

\* Testes  
[ Adenoma TGLS = 2-9 ]

Bilateral, Interstit Cell

Adenoma

\* Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 425

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 694

HISTO: 40591

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Cortex, Renal Tubule	Hyperplasia	Minimal
	Papilla	Leukemia Mononuclear	
		Mineralization	Moderate
		Nephropathy	Chronic, Mild
[ Leukemia Mononuclear TGLS = 7-19 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-15 ]			
* Lung	Alveolar Epith	Alveolar/Bronchiolar Carcinoma	
		Metaplasia	Squamous, Marked
[ Alveolar/Bronchiolar Carcinoma TGLS = 1-14 ]			
[ Metaplasia TGLS = 1-14 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Marked
[ Necrosis TGLS = 9-20 ]			
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 425

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 694

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40591

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Fibrosis TGLS = 5-16 ]

[ Leukemia Mononuclear TGLS = 4,5,6-16+17+18 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 10-9 ]

Tooth

Inflammation

Marked

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 426

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 715

HISTO: 40592

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Heart		Cardiomyopathy	Moderate
	Atrium	Thrombosis	Marked
	[ Cardiomyopathy TGLS = 2-13 ]		
	[ Thrombosis TGLS = 3-14 ]		
* Islets, Pancreatic		Adenoma	
	[ Adenoma TGLS = 10-16 ]		
* Kidney	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Marked
	[ Nephropathy TGLS = 5-15 ]		
* Liver		Leukemia Mononuclear	
		Necrosis	Moderate
	[ Necrosis TGLS = 6-6 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 9-18 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 7-17 ]		
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 426	<b>TRT#:</b> 5 <b>DOSE:</b> 50 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 715 <b>HISTO:</b> 40592
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Stomach, Glandular		Erosion	Marked
[ Erosion TGLS = 12-19 ]			
* Testes	Bilateral, Interstit Cell Germinal Epith	Adenoma Atrophy	Moderate
[ Adenoma TGLS = 8-9 ]			
[ Atrophy TGLS = 11-9 ]			

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 427

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40593

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Mild
* Lung		Alveolar/Bronchiolar Adenoma	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
* Nose	Goblet Cell	Hyperplasia	Moderate
		Inflammation	Suppurative, Marked
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 428

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40594

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx	* Lymph Node, Bronchial
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Islets, Pancreatic		Adenoma	
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy Congestion	Moderate Marked Chronic, Marked Mild
* Liver			
[ Congestion TGLS = 4-6 ]			
* Lung		Hemorrhage	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 429

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 610

HISTO: 40595

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	Eye
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Kidney	Papilla	Leukemia Mononuclear	
		Mineralization	Mild
		Nephropathy	Chronic, Mild
[ Leukemia Mononuclear TGLS = 8-7 ]			
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 6-14 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 12-18 ]			
[ Leukemia Mononuclear TGLS = 11-17 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-13 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 13-8 ]			
Mesentery		Necrosis	Marked

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 429

TRT#: 5

SEX: Male

DAY ON TEST: 610

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40595

**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Necrosis TGLS = 5-16 ]

\* Spleen

Leukemia Mononuclear

Necrosis

Moderate

[ Leukemia Mononuclear TGLS = 9-6 ]

[ Necrosis TGLS = 10-15 ]

\* Stomach, Forestomach

Ulcer

Marked

[ Ulcer TGLS = 14-19 ]

\* Testes

Interstit Cell

Adenoma

Germinal Epith

Atrophy

Marked

[ Adenoma TGLS = 3-9 ]

[ Atrophy TGLS = 4-9 ]

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Stomach;Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 430

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 718

HISTO: 40596

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Mammary Gland	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 2-13 ]			
* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Moderate Moderate Chronic, Moderate
* Liver		Hepatodiaphragmatic Nodule Necrosis	Marked Marked
[ Hepatodiaphragmatic Nodule TGLS = 6,7-14+15 ]			
Lymph Node		Ectasia	Moderate
[ Ectasia TGLS = 3-16 ]			
* Lymph Node, Mesenteric		Ectasia	Marked
[ Ectasia TGLS = 9-8 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 8-17 ]			
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 430	<b>TRT#:</b> 5 <b>DOSE:</b> 50 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 718 <b>HISTO:</b> 40596
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 5-9 ]	Interstit Cell	Hyperplasia	Moderate
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PRIMARY CAUSE OF DEATH	- Heart Atrium Thrombosis
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 431

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 596

HISTO: 40597

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Necrosis	Marked
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Minimal
	Cortex, Renal Tubule	Hyperplasia	Moderate
	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
		Thrombosis	
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Renal	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-13 ]		
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
	[ Fibrosis TGLS = 3-15 ]		
	[ Leukemia Mononuclear TGLS = 2-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-9 ]		

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 431

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 596

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40597

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 432

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 617

HISTO: 40598

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                           |                             |                           |
|--------------------------|---------------------------|-----------------------------|---------------------------|
| * Adrenal Cortex         | * Adrenal Medulla         | Blood Vessel                | * Bone                    |
| * Bone Marrow            | * Epididymis              | * Esophagus                 | * Heart                   |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Islets, Pancreatic      |
| * Larynx                 | * Liver                   | * Lung                      | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric | * Mammary Gland           | * Nose                      | * Pancreas                |
| * Parathyroid Gland      | * Preputial Gland         | * Prostate                  | * Salivary Glands         |
| * Seminal Vesicle        | * Skin                    | * Spleen                    | * Stomach, Forestomach    |
| * Stomach, Glandular     | * Thymus                  | * Thyroid Gland             | * Trachea                 |
| * Urinary Bladder        |                           |                             |                           |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

AUTO PRECLUDES DIAG.

- |                          |                          |                            |
|--------------------------|--------------------------|----------------------------|
| * Intestine Large, Cecum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
|--------------------------|--------------------------|----------------------------|

OBSERVATIONS

- |                         |                |                |               |
|-------------------------|----------------|----------------|---------------|
| * Brain                 |                | Hemorrhage     | Moderate      |
| * Kidney                | Papilla        | Mineralization | Moderate      |
|                         |                | Nephropathy    | Chronic, Mild |
| * Pituitary Gland       | Pars Distalis  | Adenoma        |               |
| [ Adenoma TGLS = 1-10 ] |                |                |               |
| * Testes                | Interstit Cell | Adenoma        |               |
|                         | Interstit Cell | Hyperplasia    | Mild          |
| [ Adenoma TGLS = 2-9 ]  |                |                |               |

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 433

TRT#: 5

SEX: Male

DAY ON TEST: 574

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40599

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Testes	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Mild
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 2-13 ]		
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Prostate		Inflammation	Suppurative, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 435

TRT#: 5

SEX: Male

DAY ON TEST: 680

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40601

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney	Cortex, Renal Tubule	Adenoma	
	Cortex, Renal Tubule	Hyperplasia	Moderate
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Marked
[ Nephropathy TGLS = 3-7 ]			
* Lung	Alveolar Epith	Hyperplasia	Moderate
[ Hyperplasia TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 436

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 680

HISTO: 40602

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Brain		Compression	Moderate
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Minimal
	Cortex, Renal Tubule	Hyperplasia	Marked
	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Marked
	[ Nephropathy TGLS = 6-7 ]		
* Liver		Hepatodiaphragmatic Nodule	Marked
		Vacuolization Cytoplasmic	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 5-13 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 2-14 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Stomach, Forestomach		Ulcer	Marked
* Testes	Bilateral, Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 436

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 680

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40602

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3-9 ]

[ Atrophy TGLS = 4-9 ]

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**PRIMARY CAUSE OF DEATH**

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 437

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40603

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Papilla	Mineralization Nephropathy	Mild Chronic, Mild
* Liver	Bile Duct	Hyperplasia	Mild
[ Hyperplasia TGLS = 3-6 ]			
* Lymph Node, Mesenteric		Hyperplasia	Lymphohistiocy, Mild
[ Hyperplasia TGLS = 5-8 ]			
* Pancreas	Acinus	Atrophy Carcinoma	Marked
[ Carcinoma TGLS = 1-6 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Hyperplasia	Lymphohistiocy, Moderate
[ Hyperplasia TGLS = 2-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 438

TRT#: 5

SEX: Male

DAY ON TEST: 694

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40604

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Marked
* Kidney	Cortex, Renal Tubule Papilla	Carcinoma Mineralization Nephropathy	Mild Chronic, Moderate
Note: Multiple ca in right kidney; no way to indicate it. NOT bilateral. [ Carcinoma TGLS = 3-13 ]			
* Lung		Alveolar/Bronchiolar Adenoma Mineralization Necrosis	Moderate Moderate
Mesentery [ Necrosis TGLS = 4-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura	Mesothelium	Hyperplasia	Moderate
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 1-14 ]			
* Testes	Interstit Cell Germinal Epith Interstit Cell	Adenoma Atrophy Hyperplasia	Marked Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 438	<b>TRT#:</b> 5	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 694
	<b>DOSE:</b> 50 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40604

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 5-9 ]

[ Atrophy TGLS = 5-9 ]

\* Thyroid Gland

C Cell

Hyperplasia

Marked

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PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 439

TRT#: 5

SEX: Male

DAY ON TEST: 652

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40605

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy	Minimal Marked Chronic, Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7,8-6+13 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-4+5 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-17 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Fibrosis	Moderate
		Hemorrhage	Marked
		Leukemia Mononuclear	
[ Fibrosis TGLS = 5-15 ]			
[ Hemorrhage TGLS = 6-14 ]			
[ Leukemia Mononuclear TGLS = 4-16 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 439

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 652

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40605

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-9 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 440

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40606

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Bronchial
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Bone	Femur	Degeneration	Marked
Note: Deformity is most accurate dx. [ Degeneration TGLS = 5-12 ]			
* Kidney	Cortex, Renal Tubule Pelvis, Transit Epithe Papilla	Hyperplasia Hyperplasia Mineralization Nephropathy	Minimal Mild Marked Chronic, Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Marked
[ Hyperplasia TGLS = 6-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 440

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 50 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40606

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 441

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40607

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

Eye [ Cataract TGLS = 1-14 ]	Lens	Cataract	Marked
* Kidney	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Mild
* Larynx		Foreign Body	Marked
		Inflammation	Chronic, Moderate
* Nose		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Congestion	Mild
* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 442

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 680

HISTO: 40608

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Heart		Cardiomyopathy	Moderate
* Islets, Pancreatic		Adenoma	
* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy	Mild Moderate Chronic, Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Hemorrhage Leukemia Mononuclear	Mild
[ Leukemia Mononuclear TGLS = 1-4+5 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-8 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 442

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 680

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40608

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 443

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 699

HISTO: 40609

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 5-16 ]			
* Brain		Inflammation	Suppurative, Marked
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Interstitialium	Fibrosis	Minimal
		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Angiectasis	Marked
[ Angiectasis TGLS = 2-3 ]			
* Salivary Glands		Inflammation	Suppurative, Moderate
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 1-15 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Interstitial Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	Interstitial Cell	Hyperplasia	Mild
[ Adenoma TGLS = 4-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 443

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 699

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40609

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Zymbal's Gland

Carcinoma

[ Carcinoma TGLS = 3-13+14 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 444

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40610

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Minimal
* Adrenal Medulla		Hyperplasia	Moderate
		Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule	Hyperplasia	Minimal
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
		Necrosis	Moderate
Mesentery			
[ Necrosis TGLS = 2-14 ]			
Oral Mucosa	Pharyngeal	Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 1-13 ]			
* Pancreas	Acinus	Atrophy	Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 445

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40611

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
[ Pheochromocytoma Benign TGLS = 6-7 ]			
* Heart		Cardiomyopathy	Mild
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy Clear Cell Focus	Mild Marked Chronic, Marked Minimal
* Liver		Adenoma	
* Pituitary Gland	Pars Distalis		
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Skin	Subcut Tiss	Cyst Epithelial Inclusion Schwannoma Benign	Marked
[ Cyst Epithelial Inclusion TGLS = 2-14 ]			
[ Schwannoma Benign TGLS = 3-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4,5-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 446

TRT#: 5

SEX: Male

DAY ON TEST: 658

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40612

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Larynx		Foreign Body	Marked
	Epiglottis	Hyperplasia	Minimal
		Inflammation	Suppurative, Moderate
* Liver		Leukemia Mononuclear	
* Lung		Inflammation	Suppurative, Moderate
		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Hyperplasia	Mild
		[ Hyperplasia TGLS = 2-9 ]	
* Spleen		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 3-13 ]	
* Testes	Interstit Cell	Hyperplasia	Marked
* Thyroid Gland	Follicular Cel	Carcinoma	
		[ Carcinoma TGLS = 1-3 ]	
* Trachea		Metaplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH - Thyroid Gland Follicular Cel Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 447

TRT#: 5

SEX: Male

DAY ON TEST: 638

DOSE: 50 PPM

DISP: Moribund Sacrifice

HISTO: 40613

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Marked
		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
	Hepatocyte	Regeneration	Marked
	[ Leukemia Mononuclear TGLS = 6-14+15+16 ]		
	[ Regeneration TGLS = 6-14+15+16 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-4 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
* Preputial Gland		Carcinoma	
	[ Carcinoma TGLS = 3-17 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-13 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 4-9 ]		

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 447

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 638

**DOSE:** 50 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40613

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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CONTRIBUTORY CAUSE OF DEATH

- Preputial Gland Carcinoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 448

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40614

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Mild
* Epididymis		Mesothelioma Malignant	
* Kidney	Papilla	Mineralization Nephropathy	Mild Chronic, Marked
* Liver		Clear Cell Focus Hepatodiaphragmatic Nodule	Moderate Marked
		[ Clear Cell Focus TGLS = 4-14 ]	
		[ Hepatodiaphragmatic Nodule TGLS = 4-14 ]	
* Nose	Goblet Cell	Hyperplasia Inflammation	Moderate Suppurative, Minimal
Peritoneum		Mesothelioma Malignant	
* Pituitary Gland	Pars Distalis	Adenoma	
		[ Adenoma TGLS = 2-10 ]	
* Preputial Gland		Adenoma	
* Skin	Subcut Tiss	Fibroma	
		[ Fibroma TGLS = 5-16 ]	
* Testes	Bilateral, Interstit Cell	Adenoma Mesothelioma Malignant	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 448	<b>TRT#:</b> 5 <b>DOSE:</b> 50 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 733 <b>HISTO:</b> 40614
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Marked
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 1-13 ]			

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 449

TRT#: 5

SEX: Male

DAY ON TEST: 734

DOSE: 50 PPM

DISP: Terminal Sacrifice

HISTO: 40615

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Bronchial	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	Tongue	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney	Cortex, Renal Tubule	Adenoma Nephropathy	Chronic, Mild
[ Adenoma TGLS = 5-7 ]			
* Liver Mesentery	Bile Duct	Hyperplasia Necrosis	Moderate Moderate
[ Necrosis TGLS = 2-14 ]			
* Prostate	Epithelium, Ventral	Hyperplasia	Moderate
* Spleen		Congestion	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3,4-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 450

TRT#: 5

DOSE: 50 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40616

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Bone	Femur, Joint, Tibia	Fracture	Marked
[ Fracture TGLS = 6-13 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Moderate
* Liver		Clear Cell Focus	
	Hepatocyte	Regeneration	Marked
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-16 ]			
* Nose		Foreign Body	Moderate
Oral Mucosa	Pharyngeal	Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 5-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 2-17 ]			
* Spleen		Congestion	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 450

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 50 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40616

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 3-9+15 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 601

TRT#: 6

SEX: Male

DAY ON TEST: 561

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40467

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	Harderian Gland
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy	Mild Moderate Chronic, Minimal
* Larynx		Foreign Body Inflammation	Marked Chronic, Moderate
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-15 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2,3-13+14 ]		
* Testes	Interstit Cell Interstit Cell	Adenoma Hyperplasia	Moderate
	[ Adenoma TGLS = 1-9 ]		
	[ Hyperplasia TGLS = 1-9 ]		

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 602

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40468

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule	Adenoma	
	Papilla	Inflammation	Suppurative, Minimal
		Mineralization	Moderate
		Nephropathy	Chronic, Moderate
* Liver		Leukemia Mononuclear	
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 1-9 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 603

TRT#: 6

SEX: Male

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40469

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Moderate Moderate Chronic, Moderate
* Lung	Alveolar Epith Alveolus	Hyperplasia Infiltration Cellular Necrosis	Minimal Histiocyte, Mild Moderate
Mesentery [ Necrosis TGLS = 3-15 ]			
* Pancreas [ Hyperplasia TGLS = 7-13 ]	Acinus	Hyperplasia	Marked
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Skin [ Fibrosarcoma TGLS = 2-16 ]	Subcut Tiss	Fibrosarcoma	
* Spleen [ Fibrosis TGLS = 4-14 ]		Fibrosis	Moderate
* Testes	Interstit Cell Germinal Epith Interstit Cell	Adenoma Atrophy Hyperplasia	Marked Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 603

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40469

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 6-9 ]

[ Atrophy TGLS = 5-9 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 604

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40470

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Pituitary Gland	
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 5-7 ]			
* Heart	Atrium	Thrombosis	Marked
* Kidney	Cortex, Renal Tubule	Hyperplasia Nephropathy	Marked Chronic, Minimal
Note: Single focus of severe tubular hyperplasia at arrow. Diff dx adenoma			
Note: Large pink cytoplasmic droplets are identical to those in some females, not interpreted as hyaline droplets.			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8,9-6+16 ]			
* Lung	Interstitium Alveolar Epith Alveolus	Fibrosis Hyperplasia Infiltration Cellular Leukemia Mononuclear	Marked Moderate Histiocyte, Marked
[ Fibrosis TGLS = 7-4+5 ]			
[ Leukemia Mononuclear TGLS = 7-4+5 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-8 ]			
Mesentery		Necrosis	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 604

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40470

**ORGAN AND ACCOUNTABLE SITE STATUS**

[ Necrosis TGLS = 6-19 ]

\* Preputial Gland

Carcinoma

[ Carcinoma TGLS = 2,3-17+18 ]

\* Prostate

Inflammation

Suppurative, Moderate

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 4-15 ]

\* Testes

Germinal Epith

Atrophy

Marked

Interstit Cell

Hyperplasia

Minimal

[ Atrophy TGLS = 10-9 ]

Zymbal's Gland

Carcinoma

[ Carcinoma TGLS = 1-13 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 605

TRT#: 6

SEX: Male

DAY ON TEST: 506

DOSE: 100 PPM

DISP: Natural Death

HISTO: 40471

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 3-16 ]			
* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-13+14 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

- Skin Subcut Tiss Fibroma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 606

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40472

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Kidney	Cortex, Renal Tubule	Hyperplasia	Marked
	Pelvis, Transit Epithe	Hyperplasia	Moderate
	Papilla	Mineralization	Marked
* Liver		Nephropathy	Chronic, Marked
		Angiectasis	Moderate
		Leukemia Mononuclear	
	[ Angiectasis TGLS = 5-14 ]		
* Lung		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 2-15 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-13 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 606

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40472

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 607

TRT#: 6

SEX: Male

DAY ON TEST: 615

DOSE: 100 PPM

DISP: Natural Death

HISTO: 40473

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                          |                           |                             |
|--------------------------|--------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | * Adrenal Medulla        | Blood Vessel              | * Bone                      |
| * Bone Marrow            | * Epididymis             | * Esophagus               | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Islets, Pancreatic     | * Larynx                  | * Lymph Node, Mediastinal   |
| * Lymph Node, Mesenteric | * Mammary Gland          | * Nose                    | * Pancreas                  |
| * Parathyroid Gland      | * Pituitary Gland        | * Preputial Gland         | * Salivary Glands           |
| * Seminal Vesicle        | * Skin                   | * Stomach, Forestomach    | * Stomach, Glandular        |
| * Thymus                 | * Thyroid Gland          | Tissue NOS                | * Trachea                   |
| * Urinary Bladder        |                          |                           |                             |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

AUTO PRECLUDES DIAG.

- \* Intestine Small, Jejunum

OBSERVATIONS

- |   |                           |                      |                   |
|---|---------------------------|----------------------|-------------------|
| * Brain                                   |                           | Hemorrhage           | Marked            |
| [ Hemorrhage TGLS = 1-1 ]                 |                           |                      |                   |
| * Kidney                                  | Papilla                   | Mineralization       | Moderate          |
|   |                           | Nephropathy          | Chronic, Minimal  |
| * Liver                                   |                           | Leukemia Mononuclear |                   |
| * Lung                                    |                           | Leukemia Mononuclear |                   |
| * Prostate                                |                           | Inflammation         | Suppurative, Mild |
| * Spleen                                  |                           | Leukemia Mononuclear |                   |
| [ Leukemia Mononuclear TGLS = 3,4-13+14 ] |                           |                      |                   |
| * Testes                                  | Bilateral, Interstit Cell | Adenoma              |                   |
| [ Adenoma TGLS = 2,5-9 ]                  |                           |                      |                   |

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Brain Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 608

TRT#: 6

SEX: Male

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40474

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Bronchial	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Heart		Cardiomyopathy	Marked
* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy Schwannoma Malignant	Marked Marked Chronic, Mild
Mesentery			
[ Schwannoma Malignant TGLS = 2-14 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Skin		Hyperkeratosis	Moderate
[ Hyperkeratosis TGLS = 3-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 609

TRT#: 6

SEX: Male

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40475

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone Marrow	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Bone	Cranium	Osteoma	
[ Osteoma TGLS = 5-13 ]			
* Brain		Carcinoma	Metastatic (Pituitary Gland)
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 7-14 ]			
* Kidney	Cortex, Renal Tubule	Carcinoma	
	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
[ Carcinoma TGLS = 6-16 ]			
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 4-15 ]			
* Pituitary Gland	Pars Distalis	Carcinoma	
[ Carcinoma TGLS = 3-10 ]			
* Stomach, Forestomach		Ulcer	Marked
* Testes	Interstit Cell	Adenoma	
	Germinal Epith	Atrophy	Marked
	Interstit Cell	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 609

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40475

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-9 ]

[ Atrophy TGLS = 2-9 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 610

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40476

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Mild Moderate Chronic, Mild
* Liver	Hepatocyte	Leukemia Mononuclear Regeneration	Marked
[ Regeneration TGLS = 5-14 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Nose	Goblet Cell	Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland		Inflammation	Suppurative, Moderate
* Skin		Trichoepithelioma	
[ Trichoepithelioma TGLS = 1-15 ]			
* Spleen		Accessory Spleen Leukemia Mononuclear	
[ Accessory Spleen TGLS = 4-13 ]			
[ Leukemia Mononuclear TGLS = 2-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 610

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40476

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 611

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 634

HISTO: 40477

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	Lacrimal Gland	* Larynx
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Kidney		Leukemia Mononuclear	
		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 3-13 ]	
		[ Leukemia Mononuclear TGLS = 10-15 ]	
* Lymph Node, Mandibular		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 1-20 ]	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 4-19 ]	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 9-14 ]	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
		[ Fibrosis TGLS = 8-18 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 611

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 634

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40477

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 6,7-16+17 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 5-9 ]

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**PRIMARY CAUSE OF DEATH**

- Lymph Node Pancreatic Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 612

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 705

HISTO: 40478

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Malignant	Moderate
Note: diff dx of tumor in adrenal on slide 16 is metastatic urinary bladder ca. [ Pheochromocytoma Malignant TGLS = 5-16 ]			
* Heart			
Note: remnant of liver in wall of heart is interpreted as artifactual.			
* Kidney	Papilla	Mineralization Nephropathy Leukemia Mononuclear	Moderate Chronic, Moderate
* Liver			
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Spleen		Accessory Spleen Leukemia Mononuclear	Marked
[ Accessory Spleen TGLS = 7-15 ]			
[ Leukemia Mononuclear TGLS = 2,3-13+14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,8-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 612

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 705

**DOSE:** 100 PPM

**DISP:** Natural Death

**HISTO:** 40478

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Urinary Bladder

Transit Epithe

Papilloma

Note: 5 step sections, found attachment to bladder wall. Mass is well differentiated but numerous mitoses.

[ Papilloma TGLS = 6-17 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Urinary Bladder Transit Epithe Papilloma

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:03

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 613

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40479

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Necrosis	Moderate
* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 1-7 ]			
* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Marked Moderate Chronic, Moderate
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Skin		Ulcer	Marked
[ Ulcer TGLS = 4-14 ]			
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell Germinal Epith	Adenoma Atrophy	Marked
[ Adenoma TGLS = 3-9 ]			
[ Atrophy TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 614

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40480

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia	Mild
		Mineralization	Moderate
		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Hemorrhage	Mild
		Leukemia Mononuclear	
[ Hemorrhage TGLS = 1-4+5+13 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-17 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 4-16 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 614

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40480

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 615

TRT#: 6

SEX: Male

DAY ON TEST: 634

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40481

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Mild Marked Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 616

TRT#: 6

SEX: Male

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40482

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy Clear Cell Focus Hepatodiaphragmatic Nodule	Marked Chronic, Mild Mild Marked
			[ Clear Cell Focus TGLS = 3-15 ] [ Hepatodiaphragmatic Nodule TGLS = 2-6 ]
* Liver			
	Interstitium Alveolus	Alveolar/Bronchiolar Adenoma Fibrosis Proteinosis	Minimal Minimal
			[ Alveolar/Bronchiolar Adenoma TGLS = 6-13 ]
* Lymph Node, Mediastinal		Pigmentation	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
			[ Hyperplasia TGLS = 1-10 ]
Pleura		Inflammation	Chronic, Mild
			[ Inflammation TGLS = 7-14 ]
* Prostate	Epithelium, Ventral	Hyperplasia Inflammation	Moderate Suppurative, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 616

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40482

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 4,5-9 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 617

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 638

HISTO: 40483

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

OBSERVATIONS

* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Mild
	Papilla	Leukemia Mononuclear	
		Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Goblet Cell	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Marked
		Inflammation	Suppurative, Minimal
		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 5-4+5 ]		
	Lymph Node	Pancreatic	Leukemia Mononuclear
	[ Leukemia Mononuclear TGLS = 9-19 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 8-18 ]		
Mesentery	Fat	Necrosis	Marked
	[ Necrosis TGLS = 4-17 ]		
* Pituitary Gland		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3-10 ]		
* Prostate		Inflammation	Suppurative, Moderate
Skeletal Muscle		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 617

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 638

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40483

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 2-16 ]			
* Skin		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-15 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-13 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Moderate
		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-9 ]			

---

**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 618

TRT#: 6

SEX: Male

DAY ON TEST: 687

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40484

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Bone                   | * Brain                    | * Esophagus               |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Larynx                  |
| * Mammary Gland             | * Nose                   | * Pancreas                 | * Parathyroid Gland       |
| * Preputial Gland           | * Salivary Glands        | * Seminal Vesicle          | * Skin                    |
| * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   | * Trachea                 |
| * Urinary Bladder           |                          |                            |                           |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |  |                      |  |                           |
|--|----------------------|--|---------------------------|
| * Adrenal Medulla                          |                      | Hyperplasia<br>Pheochromocytoma Benign             | Moderate                  |
| * Bone Marrow                              |                      | Leukemia Mononuclear                               |                           |
| * Epididymis                               |                      | Mesothelioma Malignant                             |                           |
| [ Mesothelioma Malignant TGLS = 9-9 ]      |                      |  |                           |
| * Islets, Pancreatic                       |                      | Adenoma  |                           |
| * Kidney                                   | Cortex, Renal Tubule | Hyperplasia<br>Nephropathy                         | Moderate<br>Chronic, Mild |
| * Liver                                    |                      | Hepatodiaphragmatic Nodule<br>Leukemia Mononuclear | Minimal                   |
| [ Hepatodiaphragmatic Nodule TGLS = 7-13 ] |                      |  |                           |
| [ Leukemia Mononuclear TGLS = 6-6 ]        |                      |  |                           |
| * Lung                                     |                      | Hemorrhage<br>Leukemia Mononuclear                 | Mild                      |
| [ Leukemia Mononuclear TGLS = 2-4+5 ]      |                      |  |                           |
| Lymph Node                                 | Pancreatic           | Leukemia Mononuclear                               |                           |
| [ Leukemia Mononuclear TGLS = 10-17 ]      |                      |  |                           |
| * Lymph Node, Bronchial                    |                      | Leukemia Mononuclear                               |                           |
| * Lymph Node, Mediastinal                  |                      | Leukemia Mononuclear                               |                           |
| * Lymph Node, Mesenteric                   |                      | Leukemia Mononuclear                               |                           |

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:03

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 618

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 687

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40484

**ORGAN AND ACCOUNTABLE SITE STATUS**

Mesentery [ Necrosis TGLS = 5-16 ]	Fat	Necrosis	Moderate
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Moderate
* Spleen  [ Fibrosis TGLS = 4-14 ] [ Leukemia Mononuclear TGLS = 3-15 ]		Fibrosis Leukemia Mononuclear	Moderate
* Testes [ Adenoma TGLS = 8-9 ]	Bilateral, Interstit Cell	Adenoma	
* Thyroid Gland	C Cell	Adenoma	
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 619

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40485

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Malignant	Moderate
[ Pheochromocytoma Malignant TGLS = 6-7 ]			
* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Minimal Marked Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Hemorrhage Leukemia Mononuclear	Moderate
[ Hemorrhage TGLS = 2-4+5 ]			
Lymph Node	Deep Cervical Pancreatic Renal	Leukemia Mononuclear Leukemia Mononuclear Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-15 ]			
[ Leukemia Mononuclear TGLS = 7-16 ]			
[ Leukemia Mononuclear TGLS = 5-13 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 619

**TRT#:** 6  
**DOSE:** 100 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 733  
**HISTO:** 40485

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen [ Leukemia Mononuclear TGLS = 4-13 ]		Leukemia Mononuclear
* Testes [ Adenoma TGLS = 3-9 ]	Bilateral, Interstit Cell	Adenoma

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 620

TRT#: 6

SEX: Male

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40486

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx	* Liver
* Lung	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
Eye	Lens	Cataract	Moderate
[ Cataract TGLS = 5-19 ]			
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 6-13 ]			
* Kidney	Cortex, Renal Tubule	Adenoma	
	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Minimal
[ Adenoma TGLS = 4-15 ]			
Lymph Node	Pancreatic	Ectasia	Marked
[ Ectasia TGLS = 7-14 ]			
* Lymph Node, Mediastinal		Angiectasis	Marked
* Lymph Node, Mesenteric		Ectasia	Marked
[ Ectasia TGLS = 8-18 ]			
Mesentery	Fat	Necrosis	Minimal
[ Necrosis TGLS = 2-17 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Preputial Gland		Carcinoma	
[ Carcinoma TGLS = 1-21+22 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 620

**TRT#:** 6  
**DOSE:** 100 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 734  
**HISTO:** 40486

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes [ Adenoma TGLS = 3-9 ]	Bilateral, Interstit Cell	Adenoma
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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 621

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40487

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Cortex, Renal Tubule Papilla	Carcinoma Mineralization Nephropathy	Mild Chronic, Moderate
[ Carcinoma TGLS = 6-15 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 2-17 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:03  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 621

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40487

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:03

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 622

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40488

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule	Adenoma	
	Cortex, Renal Tubule	Hyperplasia	Minimal
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
Note: differential dx tubular adenoma.			
	[ Adenoma TGLS = 5-13 ]		
* Liver		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	Marked
	[ Clear Cell Focus TGLS = 3-6 ]		
	[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]		
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Lymph Node, Bronchial		Pigmentation	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 4-9 ]		
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 622

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40488

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 623

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40489

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Prostate	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule Papilla	Adenoma Mineralization Nephropathy Hyperplasia Schwannoma Malignant	Marked Chronic, Mild Moderate
* Preputial Gland			
* Salivary Glands			
[ Schwannoma Malignant TGLS = 1-13 ]			
* Spleen		Fibrosis	Minimal
[ Fibrosis TGLS = 3-6 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 624

TRT#: 6

SEX: Male

DAY ON TEST: 600

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40490

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy	Mild Mild Chronic, Moderate
* Larynx		Inflammation	Chronic, Mild
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Mild
* Lung	Alveolar Epith Alveolus	Hyperplasia Infiltration Cellular	Minimal Histiocyte, Minimal
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 625

TRT#: 6

SEX: Male

DAY ON TEST: 687

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40491

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea

MISSING

* Adrenal Medulla	* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Papilla	Carcinoma Mineralization Nephropathy	Marked Chronic, Marked
	[ Carcinoma TGLS = 9-14+15+16 ] [ Nephropathy TGLS = 7-7 ]		
* Lung	Interstitialium Alveolar Epith	Carcinoma Fibrosis Hyperplasia	Metastatic (Kidney) Mild Marked
	[ Carcinoma TGLS = 1-4+5+17 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 6-10 ]		
* Prostate		Inflammation	Suppurative, Moderate
	[ Inflammation TGLS = 2-19 ]		
* Spleen		Hematopoietic Cell Proliferation	Moderate
	[ Hematopoietic Cell Proliferation TGLS = 4-18 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		
* Urinary Bladder		Inflammation	Suppurative, Marked

PRIMARY CAUSE OF DEATH - Kidney Cortex Renal Tubule Carcinoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 625

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 687

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40491

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 626

TRT#: 6

SEX: Male

DAY ON TEST: 669

DOSE: 100 PPM

DISP: Natural Death

HISTO: 40492

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Hemorrhage	Minimal
* Kidney	Cortex, Renal Tubule	Adenoma	
	Cortex, Renal Tubule	Hyperplasia	Marked
	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Marked
Note: adjacent to ink arrow; diff dx tubular hyperplasia			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
		Hemorrhage	Marked
[ Adenoma TGLS = 1-10 ]			
[ Hemorrhage TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Hemorrhage

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 626

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 669

**DOSE:** 100 PPM

**DISP:** Natural Death

**HISTO:** 40492

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

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Animal Note: animal died prior to necropsy

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 627

TRT#: 6

SEX: Male

DAY ON TEST: 708

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40493

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Moderate Moderate Chronic, Minimal
* Liver	Hepatocyte	Leukemia Mononuclear Regeneration	Marked
[ Regeneration TGLS = 3-15 ]			
* Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-14 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-9 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-16 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 6-9 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 627

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 708

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40493

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 628

TRT#: 6

SEX: Male

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40494

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Mediastinum	Mesothelioma Malignant	
	Alveolus	Proteinosis	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			
* Thymus		Metaplasia	Squamous, Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 629

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40495

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Marked
* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 1-9 ]			
* Islets, Pancreatic		Carcinoma	
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Moderate
Mesentery		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 3-13+8 ]			
Peritoneum		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 2-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Marked
		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 1-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 630

TRT#: 6

SEX: Male

DAY ON TEST: 419

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40496

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal	* Mammary Gland
* Nose	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Epididymis		Mesothelioma Malignant	
* Heart		Mesothelioma Malignant	Metastatic (Testes)
* Intestine Large, Colon	Serosa	Mesothelioma Malignant	Metastatic (Testes)
[ Mesothelioma Malignant TGLS = 7-18 ]			
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Marked
	Capsule	Mesothelioma Malignant	Metastatic (Testes)
		Nephropathy	Chronic, Minimal
* Liver		Mesothelioma Malignant	Metastatic (Testes)
[ Mesothelioma Malignant TGLS = 5-21 ]			
* Lung		Mesothelioma Malignant	Metastatic (Testes)
* Lymph Node, Mesenteric		Mesothelioma Malignant	Metastatic (Testes)
Mesentery		Mesothelioma Malignant	Metastatic (Testes)
[ Mesothelioma Malignant TGLS = 2-14 ]			
* Pancreas		Mesothelioma Malignant	Metastatic (Testes)
[ Mesothelioma Malignant TGLS = 4-16 ]			
Pleura		Mesothelioma Malignant	Metastatic (Testes)
Skeletal Muscle		Mesothelioma Malignant	Metastatic (Testes)
[ Mesothelioma Malignant TGLS = 6-17 ]			
* Spleen		Mesothelioma Malignant	Metastatic (Testes)

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 630

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 419

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40496

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Mesothelioma Malignant TGLS = 3,9-15+16 ]

\* Stomach, Glandular

Serosa

Mesothelioma Malignant

Metastatic (Testes)

[ Mesothelioma Malignant TGLS = 10-19 ]

\* Testes

Interstit Cell

Adenoma

Interstit Cell

Hyperplasia

Minimal

Mesothelioma Malignant

---

[ Mesothelioma Malignant TGLS = 1-13+9 ]

PRIMARY CAUSE OF DEATH

- Testes Mesothelioma Malignant

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 631

TRT#: 6

SEX: Male

DAY ON TEST: 617

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40497

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
Note: focus adjacent to ink arrow is considered tubular hyperplasia 4+, diff dx adenoma.			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
Mesentery	Fat	Necrosis	Minimal
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Moderate
* Testes	Interstitial Cell	Adenoma	
	Interstitial Cell	Hyperplasia	Mild
[ Adenoma TGLS = 3-9 ]			
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 632

TRT#: 6

SEX: Male

DAY ON TEST: 688

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40498

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Mammary Gland	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Islets, Pancreatic [ Carcinoma TGLS = 1-14 ]		Carcinoma	
* Kidney [ Adenoma TGLS = 3-13 ]	Cortex, Renal Tubule Papilla	Adenoma Mineralization Nephropathy	Marked Chronic, Moderate
* Liver [ Leukemia Mononuclear TGLS = 2-6 ]		Leukemia Mononuclear	
* Lung Lymph Node	Pancreatic	Leukemia Mononuclear Leukemia Mononuclear	
* Lymph Node, Mediastinal [ Leukemia Mononuclear TGLS = 4-3 ]		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Nose		Inflammation	Suppurative, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Leukemia Mononuclear	
* Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 632

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 688

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40498

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 633

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 687

HISTO: 40499

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Heart		Cardiomyopathy	Mild
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Mild
		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 7-6 ]		
* Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 3,4,5-17+18+19 ]		
* Lymph Node, Bronchial		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 9-16 ]		
* Mammary Gland		Carcinoma	
	[ Carcinoma TGLS = 2-14+15 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 6-10 ]		
* Prostate		Inflammation	Suppurative, Mild
* Skin		Ulcer	Mild
	[ Ulcer TGLS = 1-13 ]		
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 8-20 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 633	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 687
	<b>DOSE:</b> 100 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40499

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Minimal
[ Adenoma TGLS = 10-9 ]			

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**PRIMARY CAUSE OF DEATH** - Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 634

TRT#: 6

SEX: Male

DAY ON TEST: 722

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40500

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 4-7 ]			
* Heart		Cardiomyopathy	Mild
* Kidney		Cyst	Moderate
	Pelvis, Transit Epithe	Hyperplasia	Moderate
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Marked
[ Cyst TGLS = 3-7 ]			
[ Nephropathy TGLS = 2-7 ]			
* Parathyroid Gland		Hyperplasia	Moderate
* Prostate		Hypertrophy	Moderate
[ Hypertrophy TGLS = 6-14 ]			
* Seminal Vesicle		Dilatation	Marked
[ Dilatation TGLS = 5-13 ]			
* Testes	Germinal Epith	Atrophy	Moderate
	Interstit Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 635

TRT#: 6

SEX: Male

DAY ON TEST: 649

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40501

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 9-7 ]			
* Heart		Cardiomyopathy	Mild
* Islets, Pancreatic		Adenoma	
* Kidney	Cortex, Renal Tubule	Hyperplasia	Moderate
	Cortex, Renal Tubule	Mineralization	Minimal
	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Mild
* Larynx		Inflammation	Suppurative, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Mild
	Interstitium	Inflammation	Chronic, Mild
		Inflammation	Suppurative, Mild
		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 12-3 ]			
* Nose		Inflammation	Suppurative, Mild
* Pituitary Gland		Hemorrhage	Marked
[ Hemorrhage TGLS = 1-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 635	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 649
	<b>DOSE:</b> 100 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40501

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	
		Necrosis	Marked
[ Hemorrhage TGLS = 6-14 ]			
[ Leukemia Mononuclear TGLS = 4-15 ]			
[ Necrosis TGLS = 5-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 3-9 ]			
* Trachea		Inflammation	Suppurative, Moderate

---

PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Hemorrhage

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 636

TRT#: 6

SEX: Male

DAY ON TEST: 529

DOSE: 100 PPM

DISP: Natural Death

HISTO: 40502

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                   |                        |                   |                           |
|-------------------|------------------------|-------------------|---------------------------|
| * Adrenal Cortex  | * Adrenal Medulla      | Blood Vessel      | * Bone                    |
| * Bone Marrow     | * Brain                | * Epididymis      | * Esophagus               |
| * Heart           | * Islets, Pancreatic   | * Larynx          | * Lymph Node, Mediastinal |
| * Mammary Gland   | * Nose                 | * Pancreas        | * Parathyroid Gland       |
| * Pituitary Gland | * Preputial Gland      | * Salivary Glands | * Seminal Vesicle         |
| * Skin            | * Stomach, Forestomach | * Thymus          | * Thyroid Gland           |
| * Trachea         |                        |                   |                           |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

AUTO PRECLUDES DIAG.

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Urinary Bladder         |                             |

OBSERVATIONS

- |                                      |                           |   |                            |
|--------------------------------------|---------------------------|---|----------------------------|
| * Kidney                             |                           | Leukemia Mononuclear<br>Mineralization<br>Nephropathy | Marked<br>Chronic, Minimal |
| * Liver                              | Papilla                   | Leukemia Mononuclear                                  |                            |
| * Lung                               |                           | Leukemia Mononuclear                                  |                            |
| Lymph Node                           | Pancreatic                | Leukemia Mononuclear                                  |                            |
| [ Leukemia Mononuclear TGLS = 1-13 ] |                           |   |                            |
| * Lymph Node, Mesenteric             |                           | Leukemia Mononuclear                                  |                            |
| * Prostate                           |                           | Inflammation  | Suppurative, Moderate      |
| * Spleen                             |                           | Leukemia Mononuclear<br>Necrosis                      | Moderate                   |
| [ Leukemia Mononuclear TGLS = 2-13 ] |                           |   |                            |
| [ Necrosis TGLS = 3-14 ]             |                           |   |                            |
| * Stomach, Glandular                 |                           | Necrosis  | Mild                       |
| [ Necrosis TGLS = 5-16 ]             |                           |   |                            |
| * Testes                             | Bilateral, Interstit Cell | Adenoma   |                            |
| [ Adenoma TGLS = 4-9 ]               |                           |   |                            |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 636

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 529

**DOSE:** 100 PPM

**DISP:** Natural Death

**HISTO:** 40502

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 637

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40503

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Minimal
* Brain		Compression	Moderate
* Intestine Small, Ileum [ Leiomyoma TGLS = 4-16 ]		Leiomyoma	
* Kidney	Cortex, Renal Tubule	Adenoma	
	Cortex, Renal Tubule	Hyperplasia	Marked
	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Moderate
[ Adenoma TGLS = 3-13 ]			
* Lymph Node, Mediastinal		Angiectasis	Marked
[ Angiectasis TGLS = 5-3 ]			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 1-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Minimal
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 637

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40503

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 638

TRT#: 6

SEX: Male

DAY ON TEST: 673

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40504

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy	Moderate Minimal Chronic, Marked
[ Nephropathy TGLS = 3-7 ]			
* Larynx		Foreign Body	Mild
* Liver		Vacuolization Cytoplasmic	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Stomach, Forestomach		Hyperplasia Ulcer	Squamous, Moderate Moderate
* Testes	Interstit Cell Germinal Epith Interstit Cell	Adenoma Atrophy Hyperplasia	Mild Mild
* Thyroid Gland	Follicular Cel	Carcinoma	
[ Carcinoma TGLS = 1-3 ]			

PRIMARY CAUSE OF DEATH

- Kidney Nephropathy

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 639

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Natural Death

DAY ON TEST: 715

HISTO: 40505

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Lymphoma Malignant	
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Mild
	Cortex, Renal Tubule	Hyperplasia	Marked
	Papilla	Lymphoma Malignant	
		Mineralization	Marked
		Nephropathy	Chronic, Mild
Note: see focus adjacent to arrow; dx hyperplasia4+; diff dx tubular adenoma.			
	[ Lymphoma Malignant TGLS = 2-7 ]		
* Lung		Lymphoma Malignant	
* Lymph Node, Mediastinal		Lymphoma Malignant	
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 3-13 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
* Prostate		Inflammation	Suppurative, Mild
Skeletal Muscle		Lymphoma Malignant	
	[ Lymphoma Malignant TGLS = 3-13 ]		
* Skin	Subcut Tiss	Hemorrhage	Marked
	[ Hemorrhage TGLS = 4-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 639

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 715

**DOSE:** 100 PPM

**DISP:** Natural Death

**HISTO:** 40505

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 8-9 ]

\* Thymus

Lymphoma Malignant

[ Lymphoma Malignant TGLS = 7-3 ]

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**PRIMARY CAUSE OF DEATH**

- Skeletal Muscle Lymphoma Malignant

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Animal Note: animal died prior to necropsy

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 640

TRT#: 6

SEX: Male

DAY ON TEST: 567

DOSE: 100 PPM

DISP: Natural Death

HISTO: 40506

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Brain		Compression	Marked
* Epididymis		Spermatocoele	Moderate
[ Spermatocoele TGLS = 2-13 ]			
* Heart		Cardiomyopathy	Minimal
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Minimal
Note: cortical tubules adjacent to ink arrow suggestive of hyperplasia but not conclusive.			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Moderate
* Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 641

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40507

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Parathyroid Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy Leukemia Mononuclear	Moderate Marked Chronic, Mild
* Liver			
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Interstitialium Alveolar Epith Alveolus  Alveolus	Fibrosis Hyperplasia Infiltration Cellular Leukemia Mononuclear Proteinosis Leukemia Mononuclear	Minimal Minimal Histiocyte, Minimal  Minimal
* Lymph Node, Bronchial			
* Nose	Goblet Cell	Hyperplasia	Mild
* Pancreas	Acinus	Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[ Hyperplasia TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 641	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 733
	<b>DOSE:</b> 100 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 40507

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 2-13 ]		
* Testes	Bilateral, Interstit Cell	Adenoma
[ Adenoma TGLS = 1-9 ]		

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 642

TRT#: 6

SEX: Male

DAY ON TEST: 733

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40508

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Moderate
* Liver		Clear Cell Focus	Mild
[ Clear Cell Focus TGLS = 4-6 ]			
* Lung	Alveolar Epith	Hyperplasia	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-10 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 643

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 716

HISTO: 40509

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Brain
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Mammary Gland	* Nose
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-13 ]			
* Epididymis		Mesothelioma Malignant	
[ Mesothelioma Malignant TGLS = 5-9 ]			
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Mild
	Cortex, Renal Tubule	Hyperplasia	Mild
	Papilla	Leukemia Mononuclear	
		Mineralization	Marked
		Nephropathy	Chronic, Minimal
[ Leukemia Mononuclear TGLS = 6-7 ]			
[ Mineralization TGLS = 7-7+21 ]			
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-4+5 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10-18 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 643

**TRT#:** 6

**DOSE:** 100 PPM

**SEX:** Male

**DISP:** Moribund Sacrifice

**DAY ON TEST:** 716

**HISTO:** 40509

**ORGAN AND ACCOUNTABLE SITE STATUS**

\* Lymph Node, Mesenteric

Leukemia Mononuclear

\* Pancreas

Leukemia Mononuclear

Peritoneum

Mesothelioma Malignant

Note: Malignant mesothelioma is present on peritoneal surface of many abdominal organs on several slides.

[ Mesothelioma Malignant TGLS = 9-23 ]

\* Pituitary Gland

Pars Intermed

Hyperplasia

Moderate

\* Prostate

Leukemia Mononuclear

Skeletal Muscle

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 8,11-13+14+15+16+17+19 ]

\* Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 3-20 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

Mesothelioma Malignant

[ Mesothelioma Malignant TGLS = 5-9 ]

\* Urinary Bladder

Transit Epithe

Hyperplasia

Moderate

Leukemia Mononuclear

[ Hyperplasia TGLS = 9-23 ]

[ Leukemia Mononuclear TGLS = 9-23 ]

**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 644

TRT#: 6

DOSE: 100 PPM

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 652

HISTO: 40510

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone	* Bone Marrow	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Necrosis	Marked
* Adrenal Medulla		Necrosis	Marked
* Kidney	Cortex, Renal Tubule	Adenoma	
	Papilla	Leukemia Mononuclear	
		Mineralization	Moderate
		Nephropathy	Chronic, Mild
Note: arrow points to tubular adenoma; diff dx 4+ hyperplasia			
* Liver		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Leukemia Mononuclear	
[ Infiltration Cellular TGLS = 9-14 ]			
[ Leukemia Mononuclear TGLS = 9-14 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-16 ]			
[ Leukemia Mononuclear TGLS = 1-13 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 644	<b>TRT#:</b> 6	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 652
	<b>DOSE:</b> 100 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40510

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 7-17 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Prostate		Inflammation	Suppurative, Moderate
[ Inflammation TGLS = 10-18 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4,5-15+16 ]			
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
[ Adenoma TGLS = 8-9 ]			
* Thymus		Leukemia Mononuclear	

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**PRIMARY CAUSE OF DEATH** - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 645

TRT#: 6

SEX: Male

DAY ON TEST: 679

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40511

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	Tongue	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Bone	Cranium	Squamous Cell Carcinoma	Metastatic (Oral Mucosa)
	[ Squamous Cell Carcinoma TGLS = 7-13+14 ]		
Harderian Gland		Squamous Cell Carcinoma	Metastatic (Oral Mucosa)
	[ Squamous Cell Carcinoma TGLS = 3-15 ]		
* Int Lg Cecum			
	Note: No corresponding lesion in cecum to tgl 9.		
* Kidney	Cortex, Renal Tubule	Hyperplasia	Minimal
	Papilla	Mineralization	Marked
		Nephropathy	Chronic, Mild
Lymph Node	Deep Cervical	Inflammation	Suppurative, Moderate
	[ Inflammation TGLS = 2-18 ]		
* Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
Oral Mucosa		Inflammation	Chronic, Marked
	Pharyngeal	Squamous Cell Carcinoma	
	Note: Mass in nasal xs2 appears to arise from mucosa covering hard palate, invades adjacent orbit and skull.		
	[ Squamous Cell Carcinoma TGLS = 6-12 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

---

**ANIMAL ID:** 645

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 679

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40511

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Pituitary Gland

Pars Distalis

Hyperplasia

Minimal

\* Spleen

Fibrosis

Marked

Hematopoietic Cell Proliferation

Moderate

Hemorrhage

Moderate

[ Fibrosis TGLS = 5-17 ]

[ Hemorrhage TGLS = 5-17 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 4-9 ]

\* Thymus

Cyst

Mild

---

**PRIMARY CAUSE OF DEATH**

- Oral Mucosa Pharyngeal Squamous Cell Carcinoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 646

TRT#: 6

SEX: Male

DAY ON TEST: 688

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40512

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mesenteric
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OBSERVATIONS

* Bone		Osteosarcoma	
Note: osteogenic sarcoma in femur; diff dx hemangiosarcoma.			
* Heart		Cardiomyopathy	Minimal
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Moderate
* Lung	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mediastinal		Inflammation	Chronic, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Prostate		Inflammation	Suppurative, Mild
Skeletal Muscle		Inflammation	Chronic, Marked
* Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 1-13+14 ]			

PRIMARY CAUSE OF DEATH - Zymbal's Gland Carcinoma  
 CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 647

TRT#: 6

SEX: Male

DAY ON TEST: 617

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40513

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Moderate
	Cortex, Renal Tubule	Adenoma	
	Cortex, Renal Tubule	Carcinoma	
	Cortex, Renal Tubule	Hyperplasia	Marked
	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Marked
Note: multiple tubular adenomas present on slides 7 and 13 . We need designator for multiple adenomas. See arrows.			
Note: Compare hyaline droplets with pink globules in female kidneys.			
	[ Carcinoma TGLS = 2-13 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Prostate		Inflammation	Suppurative, Moderate
* Stomach, Forestomach		Inflammation	Suppurative, Marked
		Ulcer	Marked
	[ Inflammation TGLS = 3-15 ]		
	[ Ulcer TGLS = 3-15 ]		
* Testes	Germinal Epith	Atrophy	Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 647

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 617

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40513

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Artery

Inflammation

Moderate

---

PRIMARY CAUSE OF DEATH

- Stomach, Forestomach Ulcer

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 648

TRT#: 6

SEX: Male

DAY ON TEST: 722

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40514

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	

MISSING

* Larynx	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
* Thyroid Gland	* Trachea		

OBSERVATIONS

* Brain		Compression	Moderate
* Heart		Cardiomyopathy	Mild
* Kidney	Atrium	Thrombosis	Marked
	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Mineralization	Marked
* Lung	Interstitial	Nephropathy	Chronic, Moderate
		Fibrosis	Minimal
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Leukemia Mononuclear	
	[ Adenoma TGLS = 1-10 ]	Adenoma	
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-13 ]		
* Testes	Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3-9 ]		
* Urinary Bladder		Calculus Micro Observation Only	Marked

Note: Calculus lined by sloughed transitional epithelial cells.

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 648

**TRT#:** 6

**SEX:** Male

**DAY ON TEST:** 722

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40514

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 649

TRT#: 6

SEX: Male

DAY ON TEST: 379

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40515

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Bone Marrow		Hyperplasia	Reticulum Cell, Moderate
* Kidney	Cortex, Renal Tubule Papilla	Accumulation, Hyaline Droplet Mineralization Nephropathy	Marked Minimal Chronic, Minimal
Note: Compare hyaline droplets with larger pink globules in female kidneys.			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose		Inflammation	Suppurative, Mild
* Preputial Gland		Carcinoma	
[ Carcinoma TGLS = 1-14+15 ]			
* Spleen		Hematopoietic Cell Proliferation	Moderate
* Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

- Preputial Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 650

TRT#: 6

SEX: Male

DAY ON TEST: 613

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40516

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Testes	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Brain		Compression	Moderate
		Hemorrhage	Mild
Eye		Atrophy	Moderate
	Lens	Cataract	Marked
[ Atrophy TGLS = 2-14 ]			
* Kidney	Cortex, Renal Tubule	Accumulation, Hyaline Droplet	Moderate
	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Moderate
[ Nephropathy TGLS = 4-7 ]			
* Pancreas	Acinus	Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Prostate		Inflammation	Suppurative, Mild

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Brain Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 801

TRT#: 8

DOSE: 400 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40397

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Renal Tubule Papilla	Adenoma Mineralization Nephropathy	Moderate Chronic, Mild
[ Adenoma TGLS = 4-7 ]			
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-14 ]			
* Nose	Goblet Cell	Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5,6-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 802

TRT#: 8

SEX: Male

DAY ON TEST: 716

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40398

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mesenteric	* Nose	* Parathyroid Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 4-7 ]			
* Kidney	Cortex, Renal Tubule Papilla	Adenoma Mineralization Nephropathy	Multiple Marked Chronic, Marked
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mediastinal		Angiectasis	Moderate
[ Angiectasis TGLS = 1-3 ]			
* Mammary Gland		Galactocele	Marked
[ Galactocele TGLS = 3-13 ]			
* Pancreas	Acinus	Atrophy	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-1+10 ]			
Pleura		Inflammation	Chronic, Mild
Note: Need to add a dx of fibrosis of pleura. Please.			
* Prostate		Inflammation	Suppurative, Marked
* Stomach, Forestomach		Ulcer	Marked
[ Ulcer TGLS = 7-14 ]			
* Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 802	<b>TRT#:</b> 8	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 716
	<b>DOSE:</b> 400 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40398

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 2-9 ]	Germinal Epith	Atrophy	Marked
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PRIMARY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma
CONTRIBUTORY CAUSE OF DEATH	- Stomach;Forestomach Ulcer

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 803

TRT#: 8

DOSE: 400 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40399

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	Lacrimal Gland
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney		Nephropathy	Chronic, Moderate
* Liver		Infiltration Cellular	Lymphohistiocy, Mild
* Prostate		Inflammation	Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-15 ]			
* Spleen		Hyperplasia	Lymphohistiocy, Marked
[ Hyperplasia TGLS = 4-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2,3-9 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 804

TRT#: 8

SEX: Male

DAY ON TEST: 734

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40400

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule Pelvis, Transit Epithe Papilla	Hyperplasia Hyperplasia Mineralization Nephropathy	Mild Minimal Marked Chronic, Mild
[ Mineralization TGLS = 4-13 ]			
* Liver	Bile Duct	Hyperplasia Infiltration Cellular	Mild Lymphohistiocy, Minimal
* Lung	Alveolar Epith Alveolus	Hyperplasia Infiltration Cellular	Mild Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 3-14 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Hyperplasia	Lymphoid, Mild
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1,2-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate
Tooth	Peridont Tiss	Inflammation	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 805

TRT#: 8

SEX: Male

DAY ON TEST: 733

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40401

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                          |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex           | * Bone                    | * Bone Marrow               | * Brain                  |
| * Epididymis               | * Esophagus               | * Heart                     | * Intestine Large, Cecum |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Larynx                    | * Liver                  |
| * Lung                     | * Lymph Node, Bronchial   | * Lymph Node, Mediastinal   | * Lymph Node, Mesenteric |
| * Mammary Gland            | * Nose                    | * Parathyroid Gland         | * Prostate               |
| * Salivary Glands          | * Seminal Vesicle         | * Skin                      | * Spleen                 |
| * Stomach, Forestomach     | * Stomach, Glandular      | * Thymus                    | * Thyroid Gland          |
| * Trachea                  | * Urinary Bladder         |                             |                          |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |                             |                                  |  |                               |
|-----------------------------|----------------------------------|--|-------------------------------|
| * Adrenal Medulla           |                                  | Hyperplasia                              | Mild                          |
| * Kidney                    | Cortex, Renal Tubule<br>Papilla  | Adenoma<br>Mineralization<br>Nephropathy | Moderate<br>Chronic, Moderate |
| [ Adenoma TGLS = 5-7 ]      |                                  |  |                               |
| Mesentery                   | Fat                              | Necrosis                                 | Mild                          |
| [ Necrosis TGLS = 3-14 ]    |                                  |  |                               |
| * Pancreas                  | Acinus                           | Atrophy                                  | Mild                          |
| * Pituitary Gland           | Pars Distalis                    | Adenoma                                  |                               |
| [ Adenoma TGLS = 6-10 ]     |                                  |  |                               |
| * Preputial Gland           |                                  | Carcinoma                                |                               |
| [ Carcinoma TGLS = 1,2-15 ] |                                  |  |                               |
| * Testes                    | Interstit Cell<br>Germinal Epith | Adenoma<br>Atrophy                       | Marked                        |
| [ Adenoma TGLS = 4-9 ]      |                                  |  |                               |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 806

TRT#: 8

SEX: Male

DAY ON TEST: 694

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40402

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Brain		Compression	Mild
* Kidney	Papilla	Mineralization	Moderate
		Nephropathy	Chronic, Moderate
* Liver		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 807

TRT#: 8

SEX: Male

DAY ON TEST: 708

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40403

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Bone Marrow		Leukemia Mononuclear	
		Myelofibrosis	Moderate
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Marked
[ Nephropathy TGLS = 6-7 ]			
* Larynx		Inflammation	Suppurative, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Mesentery	Fat	Hemorrhage	Moderate
[ Hemorrhage TGLS = 8-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Prostate		Inflammation	Suppurative, Marked
* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	
[ Hemorrhage TGLS = 3-14 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 807	<b>TRT#:</b> 8 <b>DOSE:</b> 400 PPM	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 708 <b>HISTO:</b> 40403
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 2-14 ]			
* Testes	Interstit Cell Germinal Epith Interstit Cell	Adenoma Atrophy Hyperplasia	Moderate Mild
[ Adenoma TGLS = 4-9 ]			
[ Atrophy TGLS = 5-9 ]			
* Thyroid Gland	C Cell	Adenoma	
PRIMARY CAUSE OF DEATH	- Spleen Leukemia Mononuclear		
CONTRIBUTORY CAUSE OF DEATH	- Pituitary Gland Pars Distalis Adenoma		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 808

TRT#: 8

DOSE: 400 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40404

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                            |                           |                             |                           |
|----------------------------|---------------------------|-----------------------------|---------------------------|
| * Adrenal Cortex           | * Bone                    | * Bone Marrow               | * Brain                   |
| Coagulating Gland          | * Epididymis              | * Esophagus                 | * Intestine Large, Cecum  |
| * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum  |
| * Intestine Small, Jejunum | * Islets, Pancreatic      | * Larynx                    | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric   | * Mammary Gland           | * Pancreas                  | * Parathyroid Gland       |
| * Prostate                 | * Salivary Glands         | * Seminal Vesicle           | * Skin                    |
| * Spleen                   | * Stomach, Glandular      | * Thymus                    | * Trachea                 |
| * Urinary Bladder          |                           |                             |                           |

MISSING

- \* Lymph Node, Mandibular

OBSERVATIONS

- |   |  |   |                                     |
|---|--|---|-------------------------------------|
| * Adrenal Medulla   |  | Pheochromocytoma Benign<br>Pheochromocytoma Malignant       |                                     |
| [ Pheochromocytoma Malignant TGLS = 8-7 ]   |  |   |                                     |
| Blood Vessel  | Pulmn Artery                                 | Inflammation<br>Thrombosis                                  | Moderate<br>Marked                  |
| [ Thrombosis TGLS = 9-4 ]   |  |   |                                     |
| * Heart   | Atrium                                       | Cardiomyopathy<br>Thrombosis                                | Mild<br>Moderate                    |
| * Kidney  | Cortex, Renal Tubule<br>Cortex, Renal Tubule | Accumulation, Hyaline Droplet<br>Hyperplasia<br>Nephropathy | Mild<br>Minimal<br>Chronic, Marked  |
| Note: Large pink globules are also present in female cortical tubules, interpreted as NOT hyaline droplets. |  |   |                                     |
| [ Nephropathy TGLS = 7-7 ]  |  |   |                                     |
| * Liver   |  | Angiectasis   | Marked                              |
| [ Angiectasis TGLS = 5-13 ]   |  |   |                                     |
| * Lung  | Alveolus                                     | Infiltration Cellular<br>Inflammation                       | Histiocyte, Mild<br>Chronic, Marked |
| * Lymph Node, Bronchial   |  |   |                                     |
| [ Inflammation TGLS = 9-4 ]   |  |   |                                     |
| * Nose  |  | Foreign Body  | Minimal                             |

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

**ANIMAL ID:** 808

**TRT#:** 8

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 400 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40404

**ORGAN AND ACCOUNTABLE SITE STATUS**

* Pituitary Gland [ Cyst TGLS = 10-10 ]		Cyst	Minimal
* Preputial Gland [ Carcinoma TGLS = 3-14+15+16 ]		Carcinoma	
* Stomach, Forestomach		Inflammation	Suppurative, Mild
* Testes [ Adenoma TGLS = 2-9 ] [ Atrophy TGLS = 1-9 ]	Bilateral, Interstit Cell Germinal Epith	Adenoma Atrophy	Moderate
* Thyroid Gland	C Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 809

TRT#: 8

SEX: Male

DAY ON TEST: 733

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40405

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
* Islets, Pancreatic		Adenoma	
* Kidney	Cortex, Renal Tubule Papilla	Adenoma Mineralization Nephropathy	Marked Chronic, Moderate
Note: Tumor is adjacent to cyst on slide 16, small but nasty, rule out CA. [ Adenoma TGLS = 3-16 ]			
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Alveolar Epith Alveolus	Alveolar/Bronchiolar Carcinoma Hyperplasia Infiltration Cellular Leukemia Mononuclear	Moderate Histiocyte, Mild
Note: Lung tumor on slides 4 and 13 interpreted as same mass, from mediastinal lobe. [ Alveolar/Bronchiolar Carcinoma TGLS = 7-13+4 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-17 ]			
Mesentery	Artery	Inflammation	Marked
* Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 809	<b>TRT#:</b> 8 <b>DOSE:</b> 400 PPM	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 733 <b>HISTO:</b> 40405
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Prostate	Dorsal, Epithelium	Hyperplasia Inflammation	Minimal Suppurative, Minimal
* Spleen		Fibrosis Leukemia Mononuclear	Moderate
[ Fibrosis TGLS = 2-14 ] [ Leukemia Mononuclear TGLS = 1-15 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5-9 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 810

TRT#: 8

SEX: Male

DAY ON TEST: 706

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40406

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Brain	* Epididymis
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mediastinal
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Bone Marrow		Leukemia Mononuclear	
Eye	Lens	Cataract	Marked
[ Cataract TGLS = 1-14 ]			
* Kidney		Nephropathy	Chronic, Moderate
[ Nephropathy TGLS = 6-7 ]			
* Liver	Hepatocyte	Leukemia Mononuclear Regeneration	Marked
[ Regeneration TGLS = 5-15 ]			
* Lung	Alveolar Epith	Hyperplasia Leukemia Mononuclear	Mild
	Alveolar Epith	Metaplasia Leukemia Mononuclear	Squamous, Minimal
* Lymph Node, Mesenteric			
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura	Mesothelium	Hyperplasia	Minimal
* Skin		Hyperkeratosis Inflammation	Marked Chronic, Marked
[ Hyperkeratosis TGLS = 2-13 ]			
[ Inflammation TGLS = 2-13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 810

**TRT#:** 8

**DOSE:** 400 PPM

**SEX:** Male

**DISP:** Moribund Sacrifice

**DAY ON TEST:** 706

**HISTO:** 40406

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Spleen

[ Leukemia Mononuclear TGLS = 4-16 ]

Leukemia Mononuclear

\* Testes

[ Adenoma TGLS = 3-9 ]

Bilateral, Interstit Cell

Adenoma

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 811

TRT#: 8

SEX: Male

DAY ON TEST: 734

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40407

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Bronchial
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Preputial Gland	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Cortex, Renal Tubule	Hyperplasia	Mild
	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Mineralization	Moderate
* Liver		Nephropathy	Chronic, Moderate
	[ Hepatodiaphragmatic Nodule TGLS = 3-13 ]	Hepatodiaphragmatic Nodule	Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Prostate		Inflammation	Suppurative, Minimal
* Spleen		Accessory Spleen	Minimal
	[ Accessory Spleen TGLS = 4-14 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 2-9 ]		

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 812

TRT#: 8

DOSE: 400 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40408

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Bone	* Bone Marrow	* Brain
* Epididymis	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla [ Pheochromocytoma Benign TGLS = 6-7 ]		Pheochromocytoma Benign	
* Kidney	Papilla	Mineralization Nephropathy Leukemia Mononuclear	Moderate Chronic, Mild
* Liver [ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung	Interstitial Alveolar Epith Alveolus Interstitial	Fibrosis Hyperplasia Infiltration Cellular Inflammation	Mild Moderate Histiocyte, Marked Chronic, Moderate
Note: chronic interstitial inflammation is chiefly peribronchiolar [ Hyperplasia TGLS = 7-14 ]			
* Lymph Node, Mediastinal [ Leukemia Mononuclear TGLS = 1-3 ]		Leukemia Mononuclear	
Mesentery [ Necrosis TGLS = 2-13 ]	Fat	Necrosis	Minimal
Pleura		Inflammation	Chronic, Mild
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Accessory Spleen	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 812

**TRT#:** 8

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 400 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40408

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Leukemia Mononuclear

[ Accessory Spleen TGLS = 8-16 ]

[ Leukemia Mononuclear TGLS = 4-15 ]

\* Testes

Bilateral, Interstit Cell

Adenoma

[ Adenoma TGLS = 3-9 ]

\* Thyroid Gland

C Cell

Hyperplasia

Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 813

TRT#: 8

SEX: Male

DAY ON TEST: 708

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40409

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Salivary Glands	* Seminal Vesicle	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule Papilla	Carcinoma Mineralization Nephropathy	Marked Chronic, Moderate
[ Carcinoma TGLS = 1-13+14+15 ]			
* Liver		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular Leukemia Mononuclear	Histiocyte, Minimal
* Prostate		Inflammation	Suppurative, Mild
* Spleen		Fibrosis Leukemia Mononuclear	Minimal
[ Fibrosis TGLS = 3-16 ]			
[ Leukemia Mononuclear TGLS = 2-16 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 4,5-9 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Kidney Cortex Renal Tubule Carcinoma

CONTRIBUTORY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 814

TRT#: 8

SEX: Male

DAY ON TEST: 734

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40410

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Preputial Gland
* Prostate	* Salivary Glands	* Seminal Vesicle	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Mild Marked Chronic, Mild
* Liver	Bile Duct	Hepatodiaphragmatic Nodule Hyperplasia Leukemia Mononuclear	Marked Moderate
	[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]		
	[ Hyperplasia TGLS = 3-6 ]		
	[ Leukemia Mononuclear TGLS = 3-6 ]		
* Lung	Interstitialium Alveolus	Fibrosis Proteinosis	Mild Minimal
	[ Proteinosis TGLS = 4-13 ]		
Pleura		Inflammation	Chronic, Moderate
	[ Inflammation TGLS = 4-13 ]		
* Spleen		Leukemia Mononuclear	
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 1-9 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 814

**TRT#:** 8

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 400 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40410

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 815

TRT#: 8

SEX: Male

DAY ON TEST: 734

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40411

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Salivary Glands	* Seminal Vesicle	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Minimal Moderate Chronic, Moderate
* Lung	Interstitium Alveolus Alveolus	Fibrosis Infiltration Cellular	Mild Histiocyte, Minimal
Mesentery [ Hemorrhage TGLS = 3-13 ]	Fat	Proteinosis Hemorrhage	Minimal Moderate
Pleura		Inflammation	Chronic, Moderate
* Prostate		Inflammation	Mild
* Testes [ Adenoma TGLS = 2-9 ]	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 816

TRT#: 8

SEX: Male

DAY ON TEST: 734

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40412

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy	Mild Marked Chronic, Moderate
* Liver	Bile Duct	Hyperplasia	Mild
* Testes	Bilateral, Interstit Cell	Adenoma	

[ Adenoma TGLS = 2-9 ]

PRIMARY CAUSE OF DEATH

-

Animal Note: TGL 1 = No Corresponding Lesion (NCL)

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 817

TRT#: 8

DOSE: 400 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 734

HISTO: 40413

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Salivary Glands	* Seminal Vesicle
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Heart		Cardiomyopathy	Minimal
* Kidney	Cortex, Renal Tubule Papilla	Adenoma Mineralization Nephropathy	Mild Chronic, Marked
	[ Adenoma TGLS = 4-14 ] [ Nephropathy TGLS = 3-7+14 ]		
* Larynx	Epiglottis Epiglottis	Hyperplasia Metaplasia	Minimal Squamous, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Bronchial		Ectasia	Marked
Mesentery	Fat	Necrosis	Moderate
	[ Necrosis TGLS = 2-13 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
* Prostate		Inflammation	Suppurative, Moderate
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 5-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 818

TRT#: 8

SEX: Male

DAY ON TEST: 733

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40414

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Epididymis	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Preputial Gland	* Prostate	* Salivary Glands
* Seminal Vesicle	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

OBSERVATIONS

* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Mild Moderate Chronic, Moderate
* Liver		Hepatodiaphragmatic Nodule Leukemia Mononuclear	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]		
* Lung		Leukemia Mononuclear	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mandibular		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric Mesentery		Leukemia Mononuclear Necrosis	Moderate
	[ Necrosis TGLS = 6-13 ]		
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-15 ]		
* Testes	Bilateral, Interstit Cell	Adenoma	
	[ Adenoma TGLS = 3,4-9 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 819

TRT#: 8

SEX: Male

DAY ON TEST: 433

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40415

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mediastinal	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Preputial Gland	* Prostate	* Salivary Glands	* Seminal Vesicle
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
* Kidney	Cortex, Renal Tubule Medulla	Accumulation, Hyaline Droplet Casts Granular Infarct Mineralization Nephropathy	Moderate Minimal Marked Moderate Chronic, Moderate
	Papilla		
Note: Mallory-Heidenhain stain is + for hyaline droplets.			
[ Infarct TGLS = 8-17 ]			
* Larynx		Inflammation	Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
Lymph Node	Thoracic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-13 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-18 ]			
* Spleen		Leukemia Mononuclear Necrosis	Marked
[ Leukemia Mononuclear TGLS = 6-16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 819

**TRT#:** 8

**SEX:** Male

**DAY ON TEST:** 433

**DOSE:** 400 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40415

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Necrosis TGLS = 7-15 ]

\* Testes

Interstit Cell

Adenoma

\* Urinary Bladder

Muscularis

Hyperplasia

Moderate

Note: This appears to be simply an infolding of wall of bladder, a malformation. Not available in TDMS.

[ Hyperplasia TGLS = 5-10 ]

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**PRIMARY CAUSE OF DEATH**

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 820

TRT#: 8

DOSE: 400 PPM

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 40416

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Epididymis	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Preputial Gland	* Prostate
* Salivary Glands	* Seminal Vesicle	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Pelvis, Transit Epithe Papilla	Hyperplasia Mineralization Nephropathy Hepatodiaphragmatic Nodule	Mild Marked Chronic, Moderate Marked
* Liver			
[ Hepatodiaphragmatic Nodule TGLS = 4-16 ]			
* Lung	Interstitialium Alveolus	Fibrosis Infiltration Cellular Necrosis	Minimal Histiocyte, Minimal Moderate
Mesentery			
[ Necrosis TGLS = 2-14 ]			
Pleura		Inflammation	Chronic, Minimal
[ Inflammation TGLS = 3-15 ]			
* Skin		Basal Cell Adenoma	
[ Basal Cell Adenoma TGLS = 1-13 ]			
* Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 5-9 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 101

TRT#: 2

SEX: Female

DAY ON TEST: 666

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40347

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 2-16 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13+14+15 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 102

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40348

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Larynx		Inflammation	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 4-13 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14+15+16+17+18 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 103

TRT#: 2

SEX: Female

DAY ON TEST: 736

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40349

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Intestine Small, Jejunum [ Inflammation TGLS = 5-15 ]	Muscularis	Inflammation	Chronic, Moderate
* Kidney		Nephropathy	Chronic, Minimal
* Liver [ Leukemia Mononuclear TGLS = 3-6 ]		Leukemia Mononuclear	
Mesentery [ Necrosis TGLS = 4-14 ]		Necrosis	Moderate
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Spleen [ Leukemia Mononuclear TGLS = 2-13 ]		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 104

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 573

HISTO: 40350

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
Vagina			

OBSERVATIONS

* Brain		Compression	Marked
* Kidney		Nephropathy	Chronic, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 105

TRT#: 2

SEX: Female

DAY ON TEST: 359

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40351

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	Pleura	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

* Clitoral Gland	* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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**OBSERVATIONS**

* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	

Note: unusual morphology, loose conn tissue, looks edematous or myxoid.

[ Fibroadenoma TGLS = 1-13+14 ]

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 106

TRT#: 2

SEX: Female

DAY ON TEST: 736

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40352

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                             |                          |                            |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Medulla         | Blood Vessel                | * Bone                   | * Bone Marrow              |
| * Esophagus               | * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic      | * Larynx                    | * Liver                  | * Lung                     |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric    | * Nose                   | * Ovary                    |
| * Pancreas                | * Parathyroid Gland         | Pleura                   | * Salivary Glands          |
| * Skin                    | * Spleen                    | * Stomach, Forestomach   | * Stomach, Glandular       |
| * Thymus                  | * Thyroid Gland             | * Trachea                | * Urinary Bladder          |
| * Uterus                  |                             |                          |                            |

MISSING

- |                         |                          |        |
|-------------------------|--------------------------|--------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | Vagina |
|-------------------------|--------------------------|--------|

OBSERVATIONS

- |   |               |                           |               |
|---|---------------|---------------------------|---------------|
| * Adrenal Cortex  |               | Vacuolization Cytoplasmic | Moderate      |
| * Brain   |               | Compression               | Marked        |
| * Clitoral Gland  |               | Adenoma                   |               |
| [ Adenoma TGLS = 1-14 ]   |               |                           |               |
| * Kidney  |               | Nephropathy               | Chronic, Mild |
| Note: Large pink/red droplets in cortical tubules; bigger and pinker than hyaline droplets. |               |                           |               |
| * Mammary Gland   |               | Fibroadenoma              |               |
| [ Fibroadenoma TGLS = 1-13+15 ]   |               |                           |               |
| * Pituitary Gland   | Pars Distalis | Adenoma                   |               |
| [ Adenoma TGLS = 2-10 ]   |               |                           |               |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 107

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40353

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 1-9 ]			
* Kidney		Nephropathy	Chronic, Moderate
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-13+14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 108

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40354

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Liver		Clear Cell Focus	Moderate
[ Clear Cell Focus TGLS = 2-13 ]			
* Mammary Gland		Galactocele	Mild
[ Galactocele TGLS = 4-15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 109

TRT#: 2

SEX: Female

DAY ON TEST: 736

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40355

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Larynx
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Adrenal Medulla		Hyperplasia	Moderate
* Liver		Leukemia Mononuclear	
		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 6-13 ]		
* Lung		Leukemia Mononuclear	
Lymph Node	Deep Cervical	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 4-14 ]		
	[ Leukemia Mononuclear TGLS = 7-20 ]		
* Lymph Node, Mediastinal		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-3 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 8-21 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-16+17+18 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 5-19 ]		
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 109

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 40355

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Leukemia Mononuclear TGLS = 3-14 ]

\* Stomach, Forestomach

Ulcer

Marked

[ Ulcer TGLS = 9,10-15 ]

\* Urinary Bladder

Transit Epithe

Hyperplasia

Moderate

\* Uterus

Leukemia Mononuclear

Leukemia Mononuclear

Polyp Stromal

Note: xs of tissue in lumen is interpreted as polyp with MCL infiltrate.

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 110

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 688

HISTO: 40356

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Larynx		Inflammation	Chronic, Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
Lymph Node	Deep Cervical	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-14 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-8 ]			
Mesentery		Necrosis	Marked
[ Necrosis TGLS = 3-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-13 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 111

TRT#: 2

SEX: Female

DAY ON TEST: 736

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40357

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 1-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 112

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 680

HISTO: 40358

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
		Vacuolization Cytoplasmic	Moderate
[ Hyperplasia TGLS = 2-7 ]			
[ Vacuolization Cytoplasmic TGLS = 2-7 ]			
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
		Leukemia Mononuclear	
* Liver			
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-13 ]			
Tooth	Pulp	Inflammation	Suppurative, Moderate

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 113

TRT#: 2

SEX: Female

DAY ON TEST: 717

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40359

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

Harderian Gland [ Inflammation TGLS = 2-16 ]		Inflammation	Suppurative, Marked
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Vacuolization Cytoplasmic	Minimal
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Bronchial		Ectasia	Marked
		Inflammation	Suppurative, Moderate
[ Ectasia TGLS = 1-13 ]			
[ Inflammation TGLS = 1-13 ]			
* Mammary Gland [ Fibroadenoma TGLS = 3-15 ]		Fibroadenoma	
Oral Mucosa		Inflammation	Chronic, Marked
	Gingival	Squamous Cell Carcinoma	
Note: Lesion is adjacent to molar tooth in slide 12, extends dorsally to area of Harderian gland.			
* Ovary [ Thecoma Malignant TGLS = 4-14 ]		Thecoma Malignant	
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 113

**TRT#:** 2  
**DOSE:** CONTROL

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:** 717  
**HISTO:** 40359

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH	- Oral Mucosa Inflammation
CONTRIBUTORY CAUSE OF DEATH	- Harderian Gland Inflammation

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 114

TRT#: 2

SEX: Female

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40360

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Liver		Clear Cell Focus	Mild
[ Clear Cell Focus TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Carcinoma	
	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 115

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40361

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 4-6 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Necrosis	Mild
		Vacuolization Cytoplasmic	Marked
Note: Liver lesions secondary to hypoxia from atrial thrombus.			
[ Vacuolization Cytoplasmic TGLS = 2-6 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-13 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-10 ]			
* Spleen		Fibrosis	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 116

TRT#: 2

SEX: Female

DAY ON TEST: 666

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40362

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
Pleura	* Salivary Glands	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Mild
* Kidney	Pelvis	Mineralization	Minimal
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-17 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
* Skin		Basal Cell Carcinoma	
[ Basal Cell Carcinoma TGLS = 1-13+14 ]			
* Spleen		Hematopoietic Cell Proliferation	Marked
[ Hematopoietic Cell Proliferation TGLS = 3-16 ]			
Tongue		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 2-15 ]			

PRIMARY CAUSE OF DEATH

- Skin Basal Cell Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 117

TRT#: 2

SEX: Female

DAY ON TEST: 735

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40363

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland		Adenoma Inflammation	Chronic, Marked
[ Adenoma TGLS = 2-15+16 ]			
[ Inflammation TGLS = 2-15+16 ]			
* Kidney	Papilla Pelvis	Mineralization Mineralization Nephropathy Clear Cell Focus	Minimal Minimal Chronic, Minimal Mild
* Liver			
[ Clear Cell Focus TGLS = 4-6+13 ]			
* Lung	Interstitium Alveolar Epith Alveolus	Fibrosis Hyperplasia Infiltration Cellular Necrosis	Minimal Minimal Histiocyte, Minimal Moderate
Mesentery			
[ Necrosis TGLS = 5-17 ]			
* Ovary		Cyst	Minimal
[ Cyst TGLS = 3-14 ]			
* Pancreas	Acinus	Atrophy	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Pleura		Inflammation	Chronic, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 117	<b>TRT#:</b> 2 <b>DOSE:</b> CONTROL	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 40363
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Inflammation TGLS = 1-5 ]			
* Thyroid Gland	C Cell	Hyperplasia	Marked
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 118

TRT#: 2

SEX: Female

DAY ON TEST: 736

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40364

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland [ Adenoma TGLS = 1-4+15 ]		Adenoma	
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Pituitary Gland [ Hyperplasia TGLS = 3-10 ]	Pars Distalis	Hyperplasia	Marked
Pleura [ Inflammation TGLS = 5-13 ]		Inflammation	Chronic, Mild
Skeletal Muscle [ Rhabdomyosarcoma TGLS = 4-16 ]		Rhabdomyosarcoma	
* Thyroid Gland	C Cell	Adenoma	
* Uterus [ Polyp Stromal TGLS = 2-10 ]	Bilateral	Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 119

TRT#: 2

SEX: Female

DAY ON TEST: 735

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40365

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 120

TRT#: 2

SEX: Female

DAY ON TEST: 561

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40366

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 1-14+15 ]			
* Kidney		Cytoplasmic Alteration	Marked
		Nephropathy	Chronic, Minimal
Note: Large amts of eosinophilic droplets in cortical tubules; larger than those assoc with alpha2globulin. Seen also in 902.			
Note: Both 902 and 120 have large eosinophilic droplets in renal cortex, and clitoral gland CA; are they associated?			
* Lung	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
* Lymph Node, Mediastinal		Angiectasis	Moderate
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Mild

PRIMARY CAUSE OF DEATH - Clitoral Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 121

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40367

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy	Mild Chronic, Mild
* Liver		Leukemia Mononuclear Necrosis	Mild
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung	Interstitialium Alveolus	Alveolar/Bronchiolar Carcinoma Fibrosis Infiltration Cellular Fibroadenoma	Moderate Histiocyte, Moderate Multiple
* Mammary Gland			
[ Fibroadenoma TGLS = 4,8-16+18 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 6-17 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Mild
* Skin	Subcut Tiss	Neural Crest Tumor	
Note: islands of epithelium and hairs in middle of mass are interpreted as entrapped glands.			
[ Neural Crest Tumor TGLS = 2-14+15 ]			
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 121

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 40367

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Uterus

Polyp Stromal

[ Polyp Stromal TGLS = 5-13 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 122

TRT#: 2

SEX: Female

DAY ON TEST: 734

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40368

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Nephropathy	Chronic, Minimal
* Mammary Gland	Fibroadenoma	
[ Fibroadenoma TGLS = 1-13+14 ]		
* Pituitary Gland	Pars Distalis	Adenoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 123

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40369

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hypertrophy	Marked
* Clitoral Gland		Adenoma	
		Hyperplasia	Moderate
* Heart	Atrium	Thrombosis	Mild
* Kidney		Nephropathy	Chronic, Mild
[ Nephropathy TGLS = 3-7 ]			
* Liver		Leukemia Mononuclear	
* Lung	Interstitialium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Alveolus	Proteinosis	Moderate
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,4-15+16+9 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 5,6-13+14 ]			
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Carcinoma	
[ Carcinoma TGLS = 2-3 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 123

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 40369

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 124

TRT#: 2

SEX: Female

DAY ON TEST: 716

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40370

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Islets, Pancreatic		Adenoma	
* Kidney		Nephropathy	Chronic, Moderate
Lymph Node	Deep Cervical	Ectasia	Marked
		Hyperplasia	Lymphoid, Marked
[ Ectasia TGLS = 2-14 ]			
[ Hyperplasia TGLS = 2-14 ]			
* Nose		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Minimal
Tongue		Squamous Cell Carcinoma	
[ Squamous Cell Carcinoma TGLS = 1-13 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Tongue Squamous Cell Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 125

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40371

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Nose	* Pancreas	* Parathyroid Gland
Pleura	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Marked
Note: Numerous large pink/red droplets in cortical tubules.			
* Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[ Leukemia Mononuclear TGLS = 7-6+13 ]			
* Lung	Interstitialium Alveolus	Fibrosis Infiltration Cellular Leukemia Mononuclear	Minimal Histiocyte, Minimal
Lymph Node	Alveolus Thoracic	Proteinosis Leukemia Mononuclear	Minimal
[ Leukemia Mononuclear TGLS = 1-15 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 10-8 ]			
* Mammary Gland		Galactocele	Moderate
[ Galactocele TGLS = 8-17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 125	<b>TRT#:</b> 2 <b>DOSE:</b> CONTROL	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 735 <b>HISTO:</b> 40371
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Ovary [ Cyst TGLS = 6-9 ]		Cyst	Marked
* Pituitary Gland [ Hyperplasia TGLS = 9-10 ]	Pars Distalis Pars Distalis	Angiectasis Hyperplasia	Marked Marked
* Spleen [ Hemorrhage TGLS = 5-14 ] [ Leukemia Mononuclear TGLS = 4-14 ]		Hemorrhage Leukemia Mononuclear	Marked

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 126

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40372

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Cyst	Marked
		Nephropathy	Chronic, Minimal
* Liver		Clear Cell Focus	
[ Clear Cell Focus TGLS = 2-13 ]			
* Lung	Interstitial	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
Pleura		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 127

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 525

HISTO: 40373

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	Vagina
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OBSERVATIONS

* Brain		Compression	Marked
* Heart			
Note: liver fragment between aorta and r ventricle is interpreted as portion of herniated liver or floater.			
* Kidney	Pelvis	Mineralization	Mild
* Liver		Vacuolization Cytoplasmic	Marked
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 128

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40374

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Clitoral Gland	Lymph Node	* Lymph Node, Bronchial	
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney		Nephropathy	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 3,4,6-18+19+20+21 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 7,8-22+23 ]			
* Pituitary Gland		Angiectasis	Marked
[ Angiectasis TGLS = 1-10 ]			
* Skin		Sarcoma	
[ Sarcoma TGLS = 5-15+16+17 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 129

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40375

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Clitoral Gland		Cyst	Minimal
		Hyperplasia	Marked
[ Cyst TGLS = 2-9+14 ]			
* Kidney		Nephropathy	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 5-13 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2-9+14 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 130

TRT#: 2

SEX: Female

DAY ON TEST: 735

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40376

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule	Hyperplasia Nephropathy	Marked Chronic, Marked
[ Hyperplasia TGLS = 5-7 ]			
[ Nephropathy TGLS = 5-7 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 4-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Skin	Subcut Tiss	Fibrosarcoma	
[ Fibrosarcoma TGLS = 6-15 ]			
* Thyroid Gland	C Cell	Carcinoma	
	C Cell	Hyperplasia	Moderate
[ Carcinoma TGLS = 1-3 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 131

TRT#: 2

SEX: Female

DAY ON TEST: 736

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40377

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney		Nephropathy	Chronic, Mild
* Liver		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	Marked
[ Clear Cell Focus TGLS = 4-13 ]			
[ Hepatodiaphragmatic Nodule TGLS = 3-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 132

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40378

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

Eye [ Cataract TGLS = 2-14 ]	Lens	Cataract	Moderate
* Islets, Pancreatic [ Carcinoma TGLS = 5-16 ]		Carcinoma	
* Kidney	Pelvis	Mineralization Nephropathy Carcinoma	Minimal Chronic, Mild
* Mammary Gland [ Carcinoma TGLS = 1-13 ]			
Mesentery [ Necrosis TGLS = 4-15 ]		Necrosis	Moderate
* Pituitary Gland [ Adenoma TGLS = 3-10 ]	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 133

TRT#: 2

SEX: Female

DAY ON TEST: 735

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40379

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Hemorrhage	Moderate
Note: No remarkable Lesion.			
* Kidney	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Moderate
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 4-13 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 134

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40380

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney		Nephropathy	Chronic, Mild
* Lung	Alveolar Epith	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 135

TRT#: 2

SEX: Female

DAY ON TEST: 609

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40381

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	Vagina
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OBSERVATIONS

* Brain		Compression	Marked
* Kidney	Pelvis	Mineralization	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Mild
[ Ulcer TGLS = 3-13 ]		Ulcer	Marked
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Stomach;Forestomach Ulcer

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 136

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40382

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland [ Adenoma TGLS = 1-15+13 ]		Adenoma	
* Kidney		Nephropathy	Chronic, Minimal
* Liver [ Leukemia Mononuclear TGLS = 5-6 ]		Leukemia Mononuclear	
* Mammary Gland [ Fibroadenoma TGLS = 2,3,4-13+14+16+17 ]		Fibroadenoma	Multiple
* Pituitary Gland	Pars Distalis	Adenoma	
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 137

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40383

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Angiectasis	Marked
[ Angiectasis TGLS = 6-14 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2,3,7-15+16+17+18 ]			
* Nose	Goblet Cell	Hyperplasia	Minimal
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-10 ]			
Pleura		Inflammation	Chronic, Mild
* Spleen		Accessory Spleen	
[ Accessory Spleen TGLS = 4-13 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 138

TRT#: 2

SEX: Female

DAY ON TEST: 735

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40384

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Lung	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Fibroadenoma	Multiple
		Galactocele	Minimal
	[ Fibroadenoma TGLS = 1,5-13+14+15+16 ]		
	[ Galactocele TGLS = 2-17+18 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 4-19 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 3-10 ]		
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 139

TRT#: 2

SEX: Female

DAY ON TEST: 735

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40385

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland		Adenoma	
		Cyst	Marked
[ Adenoma TGLS = 1,2-13 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-14+15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 140

TRT#: 2

SEX: Female

DAY ON TEST: 716

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40386

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney	* Larynx
* Liver	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial Vagina	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Minimal
* Brain		Compression	
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Lymph Node	Deep Cervical	Infiltration Cellular	Histiocyte, Marked
	Deep Cervical	Pigmentation	Moderate
[ Infiltration Cellular TGLS = 1-13 ]			
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 4-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 141

TRT#: 2

SEX: Female

DAY ON TEST: 735

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40387

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Clear Cell Focus	Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 142

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 666

HISTO: 40388

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina	
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OBSERVATIONS

* Clitoral Gland		Adenoma	
		Hyperplasia	Marked
* Heart	Ventricle	Angiectasis	Marked
		Cardiomyopathy	Mild
		Note: Dilatation, not really angiectasis, of left ventricle.	
		Note: Moribundity apparently related to congestive heart failure; dilated left ventricle, fluid in lungs, hepatic congestion.	
* Kidney	Papilla	Mineralization	Minimal
	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Congestion	Moderate
		[ Congestion TGLS = 6-6 ]	
* Lung	Interstitium	Fibrosis	Moderate
	Alveolar Epith	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Perivascular	Pigmentation	Marked
* Mammary Gland		Carcinoma	
		Fibroadenoma	
		[ Carcinoma TGLS = 1-15 ]	
		[ Fibroadenoma TGLS = 2-13 ]	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 142

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 666

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 40388

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Pituitary Gland

Pars Distalis

Adenoma

[ Adenoma TGLS = 5-10 ]

---

PRIMARY CAUSE OF DEATH

- Heart Ventricle Angiectasis

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 143

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40389

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                           |                            |                           |                             |
|---------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex          | * Adrenal Medulla          | Blood Vessel              | * Bone                      |
| * Bone Marrow             | * Clitoral Gland           | * Esophagus               | * Heart                     |
| * Intestine Large, Cecum  | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum  | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Larynx                    |
| * Lymph Node, Mediastinal | * Lymph Node, Mesenteric   | * Mammary Gland           | * Nose                      |
| * Ovary                   | * Pancreas                 | * Parathyroid Gland       | * Salivary Glands           |
| * Skin                    | * Spleen                   | * Stomach, Forestomach    | * Stomach, Glandular        |
| * Thymus                  | * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |
| * Uterus                  |                            |                           |                             |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |  |                              |                  |
|--|------------------------------|------------------|
| * Brain                                    | Compression                  | Marked           |
| * Kidney                                   | Nephropathy                  | Chronic, Minimal |
| * Liver                                    | Clear Cell Focus             | Moderate         |
|  | Hepatodiaphragmatic Nodule   | Marked           |
| [ Clear Cell Focus TGLS = 4-13 ]           |                              |                  |
| [ Hepatodiaphragmatic Nodule TGLS = 2-14 ] |                              |                  |
| * Lung                                     | Alveolar/Bronchiolar Adenoma |                  |
| Mesentery                                  | Necrosis                     | Moderate         |
| [ Necrosis TGLS = 3-15 ]                   |                              |                  |
| * Pituitary Gland                          | Pars Distalis                |                  |
| [ Adenoma TGLS = 1-10 ]                    |                              |                  |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 144

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Natural Death

DAY ON TEST: 639

HISTO: 40390

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Islets, Pancreatic	* Larynx	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-15 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 8-8 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 6-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen		Hemorrhage	Marked
		Leukemia Mononuclear	
[ Hemorrhage TGLS = 3-17 ]			
[ Leukemia Mononuclear TGLS = 2-16 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 144

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 639

**DOSE:** CONTROL

**DISP:** Natural Death

**HISTO:** 40390

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 145

TRT#: 2

SEX: Female

DAY ON TEST: 652

DOSE: CONTROL

DISP: Moribund Sacrifice

HISTO: 40391

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Pleura	Mesothelium	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1,2-13 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 146

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 722

HISTO: 40392

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy Leukemia Mononuclear	Mild Chronic, Minimal
* Liver [ Leukemia Mononuclear TGLS = 5-6 ]			
* Lung	Interstitial Alveolar Epith Alveolus Interstitial	Fibrosis Hyperplasia Infiltration Cellular Inflammation Leukemia Mononuclear	Mild Mild Histiocyte, Moderate Chronic, Mild
Lymph Node [ Leukemia Mononuclear TGLS = 1-13 ]	Alveolus Deep Cervical	Proteinosis Leukemia Mononuclear	Mild
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Mammary Gland [ Fibroadenoma TGLS = 6-15+16 ]		Fibroadenoma	
Mesentery [ Necrosis TGLS = 2-14 ]		Necrosis	Moderate
* Nose		Foreign Body Inflammation	Mild Suppurative, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 146

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 722

**DOSE:** CONTROL

**DISP:** Moribund Sacrifice

**HISTO:** 40392

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

\* Pituitary Gland

Pars Distalis

Angiectasis

Marked

Cyst

Pleura

Mesothelium

Hyperplasia

Minimal

\* Spleen

Hemorrhage

Moderate

Leukemia Mononuclear

[ Hemorrhage TGLS = 4-18 ]

[ Leukemia Mononuclear TGLS = 3-17 ]

\* Thyroid Gland

C Cell

Hyperplasia

Minimal

---

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

---

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 147

TRT#: 2

SEX: Female

DAY ON TEST: 735

DOSE: CONTROL

DISP: Terminal Sacrifice

HISTO: 40393

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney		Nephropathy	Chronic, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-13+14+15 ]			
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 148

TRT#: 2

SEX: Female

DAY ON TEST: 705

DOSE: CONTROL

DISP: Natural Death

HISTO: 40394

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Islets, Pancreatic	* Larynx	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Thymus	* Thyroid Gland	* Trachea
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Heart	Artery	Mineralization	Marked
* Kidney	Pelvis	Dilatation	Marked
	Renal Tubule	Mineralization	Marked
		Nephropathy	Chronic, Moderate
[ Dilatation TGLS = 3-7 ]			
[ Mineralization TGLS = 3-7 ]			
* Lung	Bronchiole	Mineralization	Marked
* Parathyroid Gland		Hyperplasia	Mild
* Stomach, Forestomach		Mineralization	Marked
* Stomach, Glandular		Mineralization	Marked
Ureter		Mineralization	Marked
		Necrosis	Marked
[ Necrosis TGLS = 4-14 ]			
* Urinary Bladder		Necrosis	Marked
		Sarcoma	Metastatic (Vagina)
[ Necrosis TGLS = 5-13 ]			
[ Sarcoma TGLS = 2-13+15 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 148

**TRT#:** 2

**DOSE:** CONTROL

**SEX:** Female

**DISP:** Natural Death

**DAY ON TEST:** 705

**HISTO:** 40394

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Vagina

Sarcoma

Note: tumor in vagina and bladder contains areas of bone formation; most accurate dx is probly osteosarcoma; not an available choice in vagina or bladder.

[ Sarcoma TGLS = 1-16 ]

---

PRIMARY CAUSE OF DEATH

- Vagina Sarcoma

CONTRIBUTORY CAUSE OF DEATH

- Kidney Pelvis Dilatation;Urinary Bladder Sarcoma Vagina

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 149

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40395

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 7-14 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 2-15+16+17+18 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-19 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-10 ]			
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 6-13 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 150

TRT#: 2

DOSE: CONTROL

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 652

HISTO: 40396

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Moderate
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 3-16 ]			
* Lymph Node, Mediastinal		Inflammation	Suppurative, Moderate
[ Inflammation TGLS = 6-3 ]			
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 1-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-13 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Marked
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 301

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40667

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy	Minimal Chronic, Minimal
* Lung	Interstitium Alveolus	Fibrosis Infiltration Cellular Necrosis	Minimal Histiocyte, Minimal Moderate
Mesentery [ Necrosis TGLS = 2-13 ]			
* Nose		Foreign Body Inflammation	Minimal Suppurative, Minimal
* Pituitary Gland [ Hyperplasia TGLS = 1-10 ]	Pars Distalis	Hyperplasia	Moderate
Pleura	Mesothelium	Hyperplasia Inflammation	Minimal Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 302

TRT#: 4

SEX: Female

DAY ON TEST: 708

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40668

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Clitoral Gland		Cyst	Mild
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitialium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitialium	Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-13+14+15+16+17 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 4,5-18+19 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 303

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40669

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Bronchial	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 3-6 ]			
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-16 ]			
* Nose		Foreign Body	Mild
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[ Hyperplasia TGLS = 2-10 ]			
Pleura	Mesothelium	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
[ Inflammation TGLS = 5-13 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 303

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 735

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40669

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 304

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 722

HISTO: 40670

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe Pelvis	Hyperplasia Mineralization Nephropathy Leukemia Mononuclear	Minimal Minimal Chronic, Minimal
* Liver [ Leukemia Mononuclear TGLS = 3-6 ]			
* Mammary Gland [ Carcinoma TGLS = 1-13+14+15 ]		Carcinoma	
* Pituitary Gland [ Adenoma TGLS = 2-10 ]	Pars Distalis	Adenoma	
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

- Mammary Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 305

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40671

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

**MISSING**

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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**OBSERVATIONS**

* Kidney	Nephropathy	Chronic, Minimal
* Liver	Hepatodiaphragmatic Nodule	Marked

[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 306

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Natural Death

DAY ON TEST: 656

HISTO: 40672

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel  
\* Skin

\* Bone

\* Heart

\* Ovary

MISSING

\* Lymph Node, Mandibular

Vagina

AUTO PRECLUDES DIAG.

\* Adrenal Cortex  
\* Clitoral Gland  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mediastinal  
\* Pituitary Gland  
\* Thymus  
\* Uterus

\* Adrenal Medulla  
\* Esophagus  
\* Intestine Small, Duodenum  
\* Kidney  
\* Nose  
\* Salivary Glands  
\* Thyroid Gland

\* Bone Marrow  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Larynx  
\* Pancreas  
\* Stomach, Forestomach  
\* Trachea

\* Brain  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Liver  
\* Parathyroid Gland  
\* Stomach, Glandular  
\* Urinary Bladder

OBSERVATIONS

\* Lung  
\* Lymph Node, Bronchial  
\* Lymph Node, Mesenteric  
    [ Leukemia Mononuclear TGLS = 4-14 ]  
\* Mammary Gland  
    [ Fibroadenoma TGLS = 2-15 ]  
\* Spleen  
    [ Leukemia Mononuclear TGLS = 3-13 ]

Leukemia Mononuclear  
Leukemia Mononuclear  
Leukemia Mononuclear  
  
Fibroadenoma  
  
Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 307

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40673

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Brain		Compression	Moderate
* Kidney		Nephropathy	Chronic, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 308

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Natural Death

DAY ON TEST: 499

HISTO: 40674

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Thymus
* Thyroid Gland	* Trachea	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Adrenal Cortex	* Adrenal Medulla	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Kidney	* Pancreas	* Stomach, Forestomach
* Stomach, Glandular	* Urinary Bladder		

OBSERVATIONS

* Pituitary Gland	Pars Distalis	Adenoma Hemorrhage	Marked
[ Adenoma TGLS = 1-10 ]			
[ Hemorrhage TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 309

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40675

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mediastinal
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Kidney	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Minimal
* Larynx		Inflammation	Suppurative, Moderate
	Epiglottis	Metaplasia	Squamous, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
		[ Hepatodiaphragmatic Nodule TGLS = 2-14 ]	
		[ Leukemia Mononuclear TGLS = 3-6+14 ]	
* Lung		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 5-4+5+13 ]	
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mesenteric		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 8-21 ]	
Mesentery		Necrosis	Moderate
		[ Necrosis TGLS = 1-20 ]	
* Spleen		Leukemia Mononuclear	
		[ Leukemia Mononuclear TGLS = 4,10-15+16 ]	
* Stomach, Forestomach		Ulcer	Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 309	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 25 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 40675

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Ulcer TGLS = 11-19 ]			
* Uterus	Endometrium	Hyperplasia Polyp Stromal	Moderate
[ Polyp Stromal TGLS = 6-17+18 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 310

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40676

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney		Nephropathy	Chronic, Moderate
* Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 5-6 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3,4-13+14+15+9 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 311

TRT#: 4

SEX: Female

DAY ON TEST: 722

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40677

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 5-6 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Necrosis	Moderate
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-13+14+15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-16 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

- Heart Atrium Thrombosis

CONTRIBUTORY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 312

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40678

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland		Cyst	Minimal
		Hyperplasia	Marked
[ Cyst TGLS = 5-9 ]			
[ Hyperplasia TGLS = 5-9 ]			
* Kidney	Pelvis	Cyst	Moderate
		Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Lung	Interstitium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+15 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 3-9 ]			
Pleura	Mesothelium	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
* Stomach, Glandular		Adenoma	
[ Adenoma TGLS = 6-13 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 312

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40678

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**ORGAN AND ACCOUNTABLE SITE STATUS**

\* Thyroid Gland

C Cell

Hyperplasia

Mild

\* Uterus

Polyp Stromal

[ Polyp Stromal TGLS = 4-10 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 313

TRT#: 4

SEX: Female

DAY ON TEST: 706

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40679

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                          |                            |                           |                             |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex         | Blood Vessel               | * Bone                    | * Bone Marrow               |
| * Brain                  | * Clitoral Gland           | * Esophagus               | * Heart                     |
| * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      | * Larynx                    |
| * Lymph Node, Mesenteric | * Nose                     | * Ovary                   | * Pancreas                  |
| * Parathyroid Gland      | * Salivary Glands          | * Skin                    | * Stomach, Forestomach      |
| * Stomach, Glandular     | * Thyroid Gland            | * Trachea                 | * Urinary Bladder           |
| * Uterus                 |                            |                           |                             |

MISSING

- |                         |                          |                           |          |
|-------------------------|--------------------------|---------------------------|----------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular | * Lymph Node, Mediastinal | * Thymus |
|-------------------------|--------------------------|---------------------------|----------|

OBSERVATIONS

- |   |               |                            |                              |
|---|---------------|----------------------------|------------------------------|
| * Adrenal Medulla<br>[ Pheochromocytoma Malignant TGLS = 5-13 ] |               | Pheochromocytoma Malignant |                              |
| * Kidney  | Pelvis        | Mineralization             | Mild                         |
| * Liver<br>[ Hepatodiaphragmatic Nodule TGLS = 4-14 ]           |               | Nephropathy                | Chronic, Mild                |
| * Lung<br>[ Pheochromocytoma Malignant TGLS = 1-4+5 ]           |               | Hepatodiaphragmatic Nodule | Marked                       |
| * Mammary Gland<br>[ Fibroadenoma TGLS = 6-16 ]                 |               | Leukemia Mononuclear       |                              |
| Mesentery<br>[ Necrosis TGLS = 7-15 ]                           |               | Pheochromocytoma Malignant | Metastatic (Adrenal Medulla) |
| * Pituitary Gland<br>[ Hyperplasia TGLS = 2-10 ]                | Pars Distalis | Fibroadenoma               |                              |
| * Spleen<br>[ Leukemia Mononuclear TGLS = 3-6 ]                 |               | Necrosis                   | Moderate                     |
|   |               | Hyperplasia                | Moderate                     |
|   |               | Leukemia Mononuclear       |                              |

PRIMARY CAUSE OF DEATH - Adrenal Medulla Pheochromocytoma Malignant

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 314

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40680

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
-------------------------	--------------------------

OBSERVATIONS

* Bone			
Note: Excess cortical bone in marrow of femur is interpreted as xs through edge of bone section (?).			
* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 2-13 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 315

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40681

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
		Leukemia Mononuclear	
* Mammary Gland		Carcinoma	
		Fibroadenoma	
[ Carcinoma TGLS = 2-14 ]			
[ Fibroadenoma TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 316

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40682

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Moderate
* Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 317

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40683

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

\* Adrenal Cortex

\* Bone Marrow

\* Heart

\* Intestine Small, Duodenum

\* Larynx

\* Lymph Node, Mesenteric

\* Parathyroid Gland

\* Stomach, Forestomach

\* Trachea

\* Adrenal Medulla

\* Brain

\* Intestine Large, Cecum

\* Intestine Small, Ileum

\* Liver

\* Nose

\* Salivary Glands

\* Stomach, Glandular

\* Urinary Bladder

Blood Vessel

\* Clitoral Gland

\* Intestine Large, Colon

\* Intestine Small, Jejunum

\* Lung

\* Ovary

\* Skin

\* Thymus

\* Uterus

\* Bone

\* Esophagus

\* Intestine Large, Rectum

\* Islets, Pancreatic

\* Lymph Node, Mediastinal

\* Pancreas

\* Spleen

\* Thyroid Gland

MISSING

\* Lymph Node, Bronchial

\* Lymph Node, Mandibular

OBSERVATIONS

\* Kidney

\* Mammary Gland

[ Fibroadenoma TGLS = 2-13 ]

\* Pituitary Gland

[ Adenoma TGLS = 1-10 ]

Nephropathy

Fibroadenoma

Pars Distalis

Adenoma

Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 318

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 613

HISTO: 40684

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Clear Cell Focus	Marked
		Histiocytic Sarcoma	
[ Clear Cell Focus TGLS = 3-13 ]			
[ Histiocytic Sarcoma TGLS = 3-13 ]			
* Lymph Node, Mediastinal		Pigmentation	Marked
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 319

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40685

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	Pleura
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

Lymph Node	* Lymph Node, Bronchial	* Lymph Node, Mandibular	
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver	Serosa	Hemorrhage Leukemia Mononuclear	Marked
	[ Hemorrhage TGLS = 5-15 ]		
	[ Leukemia Mononuclear TGLS = 4-6 ]		
* Lung	Interstitialium Alveolus	Fibrosis Infiltration Cellular	Minimal Histiocyte, Minimal
	[ Infiltration Cellular TGLS = 3-13 ]		
Lymph Node			
	Note: slide 14 is normal skeletal muscle, not cervical LN.		
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland		Cyst	Marked
	[ Cyst TGLS = 2-10 ]		
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 320

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40686

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Larynx		Inflammation	Chronic, Mild
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
[ Hyperplasia TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 321

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40687

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Clitoral Gland [ Carcinoma TGLS = 3-15+16+17 ]		Carcinoma	
* Kidney [ Nephropathy TGLS = 5-7 ]	Pelvis	Mineralization Nephropathy	Moderate Chronic, Mild
* Liver [ Clear Cell Focus TGLS = 6-13 ]		Clear Cell Focus Leukemia Mononuclear	Moderate
* Lung	Interstitialium Alveolar Epith Alveolus	Fibrosis Hyperplasia Infiltration Cellular	Mild Moderate Histiocyte, Mild
* Lymph Node, Mediastinal		Angiectasis	Marked
* Mammary Gland [ Fibroadenoma TGLS = 1-18 ]		Fibroadenoma	
* Nose		Foreign Body Inflammation	Moderate Suppurative, Moderate
* Pituitary Gland [ Hyperplasia TGLS = 2-10 ]	Respirat Epith Pars Distalis	Metaplasia Hyperplasia	Squamous, Moderate Mild
* Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:04

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 321

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40687

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Sarcoma

[ Leukemia Mononuclear TGLS = 4-14 ]

[ Sarcoma TGLS = 4-14 ]

\* Thyroid Gland

C Cell

Adenoma

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 322

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40688

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Liver		Basophilic Focus	Moderate
[ Basophilic Focus TGLS = 3-13 ]			
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Necrosis	Moderate
Mesentery			
[ Necrosis TGLS = 1-14 ]			
* Nose		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
	Mesothelium	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
[ Inflammation TGLS = 2-5 ]			
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 323

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40689

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Bronchial	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Ovary		Granulosa Cell Tumor Benign	
[ Granulosa Cell Tumor Benign TGLS = 2-13 ]			
* Spleen		Leukemia Mononuclear	
* Urinary Bladder		Degeneration	Marked
* Uterus	Endometrium	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 324

TRT#: 4

SEX: Female

DAY ON TEST: 533

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40690

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

\* Lymph Node, Mandibular                      Vagina

OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lymph Node, Bronchial		Ectasia	Marked
* Lymph Node, Mediastinal		Angiectasis	Marked
[ Angiectasis TGLS = 1-3 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
Skeletal Muscle		Carcinoma	Metastatic (Zymbal'S Gland)
[ Carcinoma TGLS = 3-13 ]			
Zymbal's Gland		Carcinoma	
[ Carcinoma TGLS = 2-14+15 ]			

PRIMARY CAUSE OF DEATH

- Zymbal's Gland    Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 325

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40691

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:04

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 326

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40692

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Angiectasis	Mild
		Hepatodiaphragmatic Nodule	Marked
		[ Angiectasis TGLS = 6-6 ]	
		[ Hepatodiaphragmatic Nodule TGLS = 7-6 ]	
* Lung	Interstitium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Lymph Node, Bronchial		Pigmentation	Mild
* Mammary Gland		Fibroadenoma	Multiple
		[ Fibroadenoma TGLS = 1,2,3-13+14+15 ]	
Mesentery		Necrosis	Moderate
		[ Necrosis TGLS = 8-16 ]	
* Pituitary Gland	Pars Distalis	Carcinoma	
		[ Carcinoma TGLS = 5-10 ]	
Pleura		Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:04  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 326

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 735

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40692

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Inflammation TGLS = 4-5 ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:04

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 327

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40693

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	Pleura
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland		Carcinoma Cyst	Marked
[ Carcinoma TGLS = 3-13 ]			
[ Cyst TGLS = 1,4-13 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland		Cyst	Marked
[ Cyst TGLS = 5-10 ]			
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 6-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 328

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40694

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Bronchial	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy	Minimal Chronic, Minimal
* Liver		Clear Cell Focus	Mild
* Pituitary Gland	Pars Distalis	Adenoma	

[ Adenoma TGLS = 1-10 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 329

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40695

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	Pleura
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney	Cortex, Renal Tubule	Hyperplasia Nephropathy	Marked Chronic, Marked
[ Nephropathy TGLS = 4-13 ]			
* Lung	Interstitialium Alveolus	Fibrosis Infiltration Cellular Fibroadenoma	Minimal Histiocyte, Minimal
* Mammary Gland			
[ Fibroadenoma TGLS = 2-16+17+18 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-15 ]			
* Ovary		Cyst	Moderate
[ Cyst TGLS = 3-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 330

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Natural Death

DAY ON TEST: 663

HISTO: 40696

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Thymus	* Thyroid Gland	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Liver	* Nose	* Pancreas	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Trachea	* Urinary Bladder

OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 2-7 ]			
* Brain		Hemorrhage	Moderate
Eye		Atrophy	Marked
	Cornea	Inflammation	Suppurative, Mild
[ Atrophy TGLS = 1-13 ]			

PRIMARY CAUSE OF DEATH

- Adrenal Medulla Pheochromocytoma Malignant

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 331

TRT#: 4

SEX: Female

DAY ON TEST: 638

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40697

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	Pleura
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Bone	Humerus	Osteosarcoma	
[ Osteosarcoma TGLS = 3,4-18 ]			
Eye		Atrophy	Marked
[ Atrophy TGLS = 1-16 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Osteosarcoma	Metastatic (Bone)
[ Osteosarcoma TGLS = 5,6,7-13+14+15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
Skeletal Muscle		Osteosarcoma	Metastatic (Bone)
[ Osteosarcoma TGLS = 2-17 ]			
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Bone Humerus Osteosarcoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 332

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40698

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
Pleura	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Clitoral Gland [ Hyperplasia TGLS = 1-9 ]		Hyperplasia	Marked
* Kidney [ Nephropathy TGLS = 2-7 ]	Cortex, Renal Tubule	Hyperplasia Nephropathy	Marked Chronic, Marked
* Lung [ Fibrosis TGLS = 4-13 ]	Interstitialium Alveolar Epith Alveolus Interstitialium Alveolus	Fibrosis Hyperplasia Infiltration Cellular Inflammation Proteinosis	Moderate Mild Histiocyte, Mild Chronic, Moderate Moderate
* Pituitary Gland [ Adenoma TGLS = 3-10 ]	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 333

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40699

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Hyperplasia	Moderate
* Brain		Compression	Mild
* Kidney	Cortex, Renal Tubule	Hyperplasia	Minimal
	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Moderate
* Larynx		Inflammation	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,5-9+13 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 334

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40700

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Cyst	Marked
		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
		Necrosis	Mild
	Hepatocyte	Regeneration	Marked
	[ Leukemia Mononuclear TGLS = 3-6 ]		
	[ Regeneration TGLS = 3-6 ]		
* Lung		Leukemia Mononuclear	
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 1-13 ]		
* Ovary		Cyst	Moderate
	[ Cyst TGLS = 2-9 ]		
* Pituitary Gland		Cyst	Marked
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 335

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 722

HISTO: 40701

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Brain	Ear	* Esophagus	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mandibular	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

Vagina

OBSERVATIONS

* Bone Marrow		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-13 ]			
* Clitoral Gland		Adenoma	
* Heart	Atrium	Thrombosis	Marked
[ Thrombosis TGLS = 12-6 ]			
* Kidney		Nephropathy	Chronic, Mild
* Larynx		Foreign Body	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-6 ]			
* Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3,4-5+20+21 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 9-22 ]			
* Mammary Gland		Fibroadenoma	Multiple

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 335	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 722
	<b>DOSE:</b> 25 PPM	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 40701

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Fibroadenoma TGLS = 1,8-15+16+17+18 ]	Galactocele	Marked
[ Galactocele TGLS = 10-23 ]		
Mesentery	Necrosis	Marked
[ Necrosis TGLS = 7-14 ]		
* Spleen	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-19 ]		

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PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 336

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40702

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Brain		Compression	Moderate
* Kidney	Cortex, Renal Tubule	Hyperplasia	Mild
	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Marked
* Larynx		Inflammation	Chronic, Mild
* Liver		Clear Cell Focus	Mild
[ Clear Cell Focus TGLS = 3-6 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Marked
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 4-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 337

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40703

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Larynx	Epiglottis, Respirat Epith	Degeneration	Minimal
		Inflammation	Chronic, Mild
* Liver		Angiectasis	Minimal
[ Angiectasis TGLS = 2-6 ]			
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 338

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 728

HISTO: 40704

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	Ear	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Brain		Compression	Moderate
* Clitoral Gland		Hyperplasia	Moderate
* Kidney	Pelvis, Transit Epithe	Hyperplasia	Mild
	Pelvis	Mineralization	Moderate
		Nephropathy	Chronic, Moderate
* Liver		Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 6-17 ]		
* Lung	Alveolar Epith	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Interstitium	Inflammation	Chronic, Moderate
	Alveolus	Proteinosis	Moderate
* Lymph Node, Bronchial		Pigmentation	Marked
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 4-16 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 5-14 ]		
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 2-10 ]		
Pleura		Inflammation	Chronic, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 338

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 728

**DOSE:** 25 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40704

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Inflammation TGLS = 3-15 ]

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 339

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40705

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	Pleura
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Mild
* Liver		Clear Cell Focus	Mild
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 340

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40706

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy	Minimal Chronic, Mild
* Lung	Interstitialium Alveolar Epith Alveolus Interstitialium Alveolus	Fibrosis Hyperplasia Infiltration Cellular Inflammation	Moderate Moderate Histiocyte, Mild Chronic, Moderate
* Mammary Gland [ Fibroadenoma TGLS = 1,2,3-14+15+16 ]		Proteinosis Fibroadenoma	Moderate Multiple
* Pituitary Gland [ Cyst TGLS = 4-10 ]	Pars Distalis	Adenoma Cyst	Marked
Pleura [ Inflammation TGLS = 5-13 ]	Mesothelium	Hyperplasia Inflammation	Mild Chronic, Moderate
* Thyroid Gland	C Cell C Cell	Adenoma Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 340

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 25 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40706

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 341

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40707

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	Pleura
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Interstitial	Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Minimal
Note: Lesions in both lungs.			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 342

TRT#: 4

SEX: Female

DAY ON TEST: 708

DOSE: 25 PPM

DISP: Moribund Sacrifice

HISTO: 40708

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina	
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OBSERVATIONS

* Islets, Pancreatic		Carcinoma	
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-6 ]			
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1,2,3-13+14+17+18+19 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 6-15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 8-16 ]			
* Spleen		Leukemia Mononuclear	
		Necrosis	Marked
[ Leukemia Mononuclear TGLS = 4-20 ]			
[ Necrosis TGLS = 5-20 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:05

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 342

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 708

**DOSE:** 25 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40708

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 343

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40709

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland [ Adenoma TGLS = 2,3-9 ]		Adenoma	
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Mammary Gland [ Carcinoma TGLS = 4-14 ]		Carcinoma	
* Ovary [ Cyst TGLS = 7-9 ]		Cyst	Minimal
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 344

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40710

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Kidney	* Larynx	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Proteinosis	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Minimal
* Skin		Cyst Epithelial Inclusion	Marked
[ Cyst Epithelial Inclusion TGLS = 3-13 ]			
* Uterus	Endometrium	Hyperplasia	Mild

Note: this is end stage of cystic endometrial hyperplasia, as opposed to hydrometra (?).

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 345

TRT#: 4

SEX: Female

DAY ON TEST: 635

DOSE: 25 PPM

DISP: Natural Death

HISTO: 40711

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina	Zymbal's Gland
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OBSERVATIONS

* Bone [ Hemorrhage TGLS = 4-16 ]	Cranium	Hemorrhage	Mild
* Kidney		Granulosa Cell Tumor Malignant Nephropathy	Metastatic (Ovary) Chronic, Mild
* Lung [ Granulosa Cell Tumor Malignant TGLS = 5-4,5,13,14,15 ]		Granulosa Cell Tumor Malignant	Metastatic (Ovary)
* Ovary [ Granulosa Cell Tumor Malignant TGLS = 2-17 ]		Granulosa Cell Tumor Malignant	
* Pituitary Gland [ Adenoma TGLS = 3-10 ]	Pars Distalis	Adenoma	
* Uterus	Endometrium	Metaplasia Polyp Stromal	Squamous, Moderate

Note: squamous metaplasia of endometrium covering stromal polyp

PRIMARY CAUSE OF DEATH - Ovary Granulosa Cell Tumor Malignant

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 346

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40712

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Ovary	Oviduct
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Mild
		Necrosis	Moderate
Mesentery			
[ Necrosis TGLS = 3-14 ]			
* Nose		Foreign Body	Minimal
	Goblet Cell	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura	Mesothelium	Hyperplasia	Minimal
* Spleen		Accessory Spleen	
[ Accessory Spleen TGLS = 2-13 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 347

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40713

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

\* Lymph Node, Bronchial

OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
Pleura	Mesothelium	Hyperplasia	Minimal
		Inflammation	Chronic, Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 348

TRT#: 4

DOSE: 25 PPM

SEX: Female

DISP: Natural Death

DAY ON TEST: 728

HISTO: 40714

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Intestine Small, Ileum	* Intestine Small, Jejunum	* Kidney
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14+15 ]			
Mesentery		Necrosis	Mild
[ Necrosis TGLS = 2-13 ]			
* Stomach, Forestomach		Ulcer	Moderate
[ Ulcer TGLS = 4-17 ]			
* Urinary Bladder	Transit Epithe	Hyperplasia	Marked
[ Hyperplasia TGLS = 3-16 ]			

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 349

TRT#: 4

SEX: Female

DAY ON TEST: 735

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40715

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitial	Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-6 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 350

TRT#: 4

SEX: Female

DAY ON TEST: 736

DOSE: 25 PPM

DISP: Terminal Sacrifice

HISTO: 40716

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-13 ]			
* Ovary		Granulosa Cell Tumor Benign	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 701

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40517

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia Vacuolization Cytoplasmic	Marked Moderate
* Bone [ Osteosarcoma TGLS = 5-16 ]	Humerus	Osteosarcoma	
* Islets, Pancreatic		Hyperplasia	Moderate
* Kidney	Pelvis, Transit Epithe	Hyperplasia Nephropathy	Mild Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 1-13 ] [ Galactocele TGLS = 1-13 ]		Fibroadenoma Galactocele	Marked
Mesentery Note: Multiple sites. [ Necrosis TGLS = 3,4-14+15 ]		Necrosis	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Minimal
* Thyroid Gland	C Cell	Hyperplasia	Moderate
* Uterus		Polyp Stromal	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 701

**TRT#:** 7

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40517

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Polyp Stromal TGLS = 2-10 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 702

TRT#: 7

SEX: Female

DAY ON TEST: 666

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40518

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

Eye [ Cataract TGLS = 1-13 ]	Lens	Cataract	Moderate
* Kidney		Nephropathy	Chronic, Moderate
* Lung	Interstitium	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
* Mammary Gland [ Fibroadenoma TGLS = 2-17 ]		Fibroadenoma	
Mesentery [ Necrosis TGLS = 3-14 ]		Necrosis	Moderate
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Minimal
* Skin [ Schwannoma Malignant TGLS = 2-15+16+17 ]	Subcut Tiss	Schwannoma Malignant	
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Schwannoma Malignant

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 703

TRT#: 7

SEX: Female

DAY ON TEST: 694

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40519

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	Ear
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Moderate
* Mammary Gland		Carcinoma	
Note: mammary ca is adjacent to clitoral gland on slide 9			
* Nose	Goblet Cell	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Skin	Subcut Tiss	Sarcoma	
[ Sarcoma TGLS = 1-14 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus	Endometrium	Inflammation	Suppurative, Moderate
		Polyp Stromal	
[ Polyp Stromal TGLS = 3-9 ]			

PRIMARY CAUSE OF DEATH - Skin Subcut Tiss Sarcoma  
 CONTRIBUTORY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 704

TRT#: 7

SEX: Female

DAY ON TEST: 736

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40520

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]			
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Interstitialium	Inflammation	Chronic, Minimal
	Alveolus	Proteinosis	Minimal
[ Fibrosis TGLS = 2-5 ]			
* Nose	Goblet Cell	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 2-5 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 705

TRT#: 7

SEX: Female

DAY ON TEST: 665

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40521

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Bronchial	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney	Nephropathy	Chronic, Minimal
* Liver	Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 3-16 ]		
* Mammary Gland	Fibroadenoma	
[ Fibroadenoma TGLS = 2-13+14+15 ]		

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 706

TRT#: 7

SEX: Female

DAY ON TEST: 736

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40522

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 5-16 ]			
* Lung	Interstitialium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Alveolar Epith	Metaplasia	Squamous, Mild
	Alveolus	Proteinosis	Mild
[ Hyperplasia TGLS = 4-15 ]			
Pleura	Mesothelium	Hyperplasia	Minimal
		Inflammation	Chronic, Moderate
[ Inflammation TGLS = 2,3-13+14 ]			
* Skin	Subcut Tiss	Fibrosarcoma	
[ Fibrosarcoma TGLS = 1-17 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 707

TRT#: 7

SEX: Female

DAY ON TEST: 736

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40523

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy Leukemia Mononuclear	Minimal Chronic, Moderate
* Liver			
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Lung	Interstitialium Alveolus Interstitialium	Fibrosis Infiltration Cellular Inflammation Leukemia Mononuclear Proteinosis	Mild Histiocyte, Moderate Chronic, Mild
[ Infiltration Cellular TGLS = 4-14 ]	Alveolus		Moderate
* Mammary Gland		Galactocele Necrosis	Marked Moderate
Mesentery			
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura	Mesothelium	Hyperplasia Inflammation	Mild Chronic, Mild
[ Inflammation TGLS = 3-5 ]			
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 707

**TRT#:** 7

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40523

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 708

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40524

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney	Cortex, Renal Tubule	Hyperplasia	Minimal
	Pelvis, Transit Epithe	Hyperplasia	Mild
	Papilla	Mineralization	Minimal
	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Moderate
* Liver		Basophilic Focus	Mild
* Lung	Interstitium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitium	Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Mild
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura	Mesothelium	Hyperplasia	Mild
		Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 708

**TRT#:** 7

**SEX:** Female

**DAY ON TEST:** 735

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40524

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Inflammation TGLS = 3-5 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 709

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40525

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney		Nephropathy	Chronic, Mild
* Lung	Interstitialium	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Mammary Gland		Galactocele	Marked
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-9 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 710

TRT#: 7

SEX: Female

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40526

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Clitoral Gland		Carcinoma	
[ Carcinoma TGLS = 6-9 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
[ Infiltration Cellular TGLS = 5-16 ]			
Lymph Node	Pancreatic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-13 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-14+15 ]			
Pleura		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	
		Necrosis	Marked
[ Leukemia Mononuclear TGLS = 1-17 ]			
[ Necrosis TGLS = 2-17 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 710

**TRT#:** 7

**SEX:** Female

**DAY ON TEST:** 734

**DOSE:** 100 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40526

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**CONTRIBUTORY CAUSE OF DEATH** - Mammary Gland Fibroadenoma

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 712

TRT#: 7

SEX: Female

DAY ON TEST: 736

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40528

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	
		Galactocele	Marked
Note: Minimal malignant change but solid pattern leads to dx of CA.			
Note: CA arising in fibroadenoma.			
[ Carcinoma TGLS = 3-15 ]			
[ Fibroadenoma TGLS = 3-15 ]			
[ Galactocele TGLS = 3-15+9 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Pituitary Gland		Cyst	Marked
	Pars Distalis	Hyperplasia	Marked
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-13 ]			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:05

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 712

**TRT#:** 7

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40528

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 713

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40529

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

Eye [ Cataract TGLS = 1-15 ]	Lens	Cataract	Mild
* Kidney [ Nephropathy TGLS = 3-13 ]	Cortex, Renal Tubule	Hyperplasia Nephropathy	Marked Chronic, Marked
* Lung	Interstitialium Alveolus	Fibrosis Infiltration Cellular Fibroadenoma	Minimal Histiocyte, Minimal
* Mammary Gland Note: mammary ca arising in fibroadenoma. [ Fibroadenoma TGLS = 4-16 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild
* Uterus [ Polyp Stromal TGLS = 2-14 ]		Polyp Stromal	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 714

TRT#: 7

SEX: Female

DAY ON TEST: 735

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40530

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy	Mild Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Interstitialium Alveolar Epith Alveolus Alveolus	Fibrosis Hyperplasia Infiltration Cellular	Mild Minimal Histiocyte, Mild
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Proteinosis Adenoma	Mild
Pleura	Mesothelium	Hyperplasia Inflammation	Minimal Chronic, Mild
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 715

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40531

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Lung	Interstitium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-14+15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura	Mesothelium	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 716

TRT#: 7

SEX: Female

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40532

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitial	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
[ Infiltration Cellular TGLS = 2-5 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-15 ]			
* Nose		Foreign Body	Moderate
	Goblet Cell	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 717

TRT#: 7

SEX: Female

DAY ON TEST: 736

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40533

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 718

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40534

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Larynx	Epiglottis, Respirat Epith	Degeneration	Minimal
* Liver		Clear Cell Focus	Moderate
[ Clear Cell Focus TGLS = 2-13 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose		Inflammation	Suppurative, Mild
* Ovary		Cyst	Marked
[ Cyst TGLS = 3-9 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 719

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40535

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Larynx	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
Pleura	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Parathyroid Gland
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Clitoral Gland		Adenoma	
[ Adenoma TGLS = 5-9 ]			
* Islets, Pancreatic		Carcinoma	
[ Carcinoma TGLS = 2-14 ]			
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 4-13 ]			
* Lung	Interstitium	Fibrosis	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 7-17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3,6-15+16 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 1-10 ]			
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 720

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40536

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-13 ]			
* Nose	Goblet Cell	Hyperplasia	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
[ Inflammation TGLS = 4-5 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 721

TRT#: 7

SEX: Female

DAY ON TEST: 736

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40537

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Bronchial	* Lymph Node, Mandibular
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitialium	Inflammation	Chronic, Minimal
	Alveolus	Proteinosis	Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 722

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 679

HISTO: 40538

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

Vagina

OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 723

TRT#: 7

SEX: Female

DAY ON TEST: 735

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40539

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Moderate
* Adrenal Medulla		Pheochromocytoma Malignant	
[ Pheochromocytoma Malignant TGLS = 6-7 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 5-14 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 2-9 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 724

TRT#: 7

SEX: Female

DAY ON TEST: 736

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40540

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Mild
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Moderate
		Carcinoma	
* Mammary Gland [ Carcinoma TGLS = 2-13 ]			
* Nose		Foreign Body	Mild
		Inflammation	Suppurative, Mild
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 725

TRT#: 7

SEX: Female

DAY ON TEST: 735

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40541

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Cyst	Mild
		Nephropathy	Chronic, Mild
[ Cyst TGLS = 1-13 ]			
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
* Ovary		Cyst	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 726

TRT#: 7

SEX: Female

DAY ON TEST: 735

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40542

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Papilla	Mineralization Nephropathy	Minimal Chronic, Minimal
* Larynx		Inflammation	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 2-6 ]		
* Lung	Interstitialium Alveolus Interstitialium	Fibrosis Infiltration Cellular Inflammation	Mild Histiocyte, Mild Chronic, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
Pleura		Inflammation	Chronic, Mild
	[ Inflammation TGLS = 4-5 ]		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 727

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40543

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 2,3-6 ]		
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 1-10 ]		
Pleura	Mesothelium	Hyperplasia	Mild
		Inflammation	Chronic, Mild
	[ Inflammation TGLS = 4-5 ]		
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 728

TRT#: 7

SEX: Female

DAY ON TEST: 665

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40544

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Brain		Compression	Marked
* Kidney		Nephropathy	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 6-13 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 4-9 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Thyroid Gland	Follicular Cel	Adenoma	
	C Cell	Carcinoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 5-10 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 729

TRT#: 7

SEX: Female

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40545

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Clitoral Gland		Cyst	Mild
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Clear Cell Focus	Moderate
[ Clear Cell Focus TGLS = 2-13 ]			
* Mammary Gland		Carcinoma	
Note: Diff dx fibroadenoma.			
[ Carcinoma TGLS = 1-14 ]			
* Nose		Foreign Body	Moderate
		Inflammation	Suppurative, Minimal
	Respirat Epith	Metaplasia	Squamous, Minimal
* Urin Bladder			
Note: diff dx fibroadenoma.			
Note: diff dx fibroadenoma			
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 730

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40546

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Adrenal Medulla        | Blood Vessel               | * Bone                    |
| * Bone Marrow               | * Brain                  | * Clitoral Gland           | * Esophagus               |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Larynx                    | * Lung                   | * Lymph Node, Mediastinal  | * Lymph Node, Mesenteric  |
| * Nose                      | * Ovary                  | * Pancreas                 | * Parathyroid Gland       |
| * Salivary Glands           | * Skin                   | * Stomach, Forestomach     | * Stomach, Glandular      |
| * Thymus                    | * Thyroid Gland          | * Trachea                  | * Urinary Bladder         |
| * Uterus                    |                          |                            |                           |

MISSING

- |                         |                          |
|-------------------------|--------------------------|
| * Lymph Node, Bronchial | * Lymph Node, Mandibular |
|-------------------------|--------------------------|

OBSERVATIONS

- |                                     |                      |               |
|-------------------------------------|----------------------|---------------|
| * Kidney                            | Nephropathy          | Chronic, Mild |
| * Liver                             | Leukemia Mononuclear |               |
| [ Leukemia Mononuclear TGLS = 3-6 ] |                      |               |
| * Mammary Gland                     | Carcinoma            |               |
| [ Carcinoma TGLS = 2-13 ]           |                      |               |
| * Pituitary Gland                   | Pars Distalis        | Adenoma       |
| [ Adenoma TGLS = 1-10 ]             |                      |               |
| * Spleen                            | Leukemia Mononuclear |               |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 731

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40547

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Liver		Inflammation	Granulomatous, Mild
	Periportal	Pigmentation	Moderate
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-14 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 3-9 ]			
* Pituitary Gland		Cyst	Mild
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-13 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 732

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40548

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
Lymph Node	Thoracic	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-14 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,5-13+15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 733

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40549

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
Eye	Choroid, Sclera	Mineralization	Moderate
[ Mineralization TGLS = 2-14 ]			
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 6-15 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 3-9 ]			
* Skin		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 1-13 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5-6 ]			
* Uterus	Endometrium	Carcinoma	
Note: Cystic spaces in endometrial mass; coccidiosis? Stop the presses. Proably just mucus.			
[ Carcinoma TGLS = 4-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 733

**TRT#:** 7

**SEX:** Female

**DAY ON TEST:** 736

**DOSE:** 100 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40549

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 734

TRT#: 7

SEX: Female

DAY ON TEST: 722

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40550

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney	Cortex, Renal Tubule Pelvis	Hyperplasia Mineralization Nephropathy	Marked Mild Chronic, Mild
* Lung	Interstitialium Alveolus Interstitialium Alveolus	Fibrosis Infiltration Cellular Inflammation	Mild Histiocyte, Moderate Chronic, Mild
Lymph Node	Pancreatic	Proteinosis	Moderate
* Lymph Node, Bronchial		Pigmentation	Moderate
* Mammary Gland		Infiltration Cellular	Histiocyte, Mild
	[ Fibroadenoma TGLS = 3,4,5-13+14+15+16 ]	Fibroadenoma	Multiple
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
Pleura	Mesothelium	Hyperplasia Inflammation	Mild Chronic, Moderate
* Skin		Squamous Cell Carcinoma	
	[ Squamous Cell Carcinoma TGLS = 6-17+18 ]		
* Spleen		Hematopoietic Cell Proliferation	Marked

PRIMARY CAUSE OF DEATH - Skin Squamous Cell Carcinoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 735

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40551

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Blood Vessel	* Bone	* Bone Marrow	* Brain
* Clitoral Gland	* Esophagus	Eye	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Adrenal Medulla		Pheochromocytoma Benign	
* Kidney	Pelvis	Dilatation	Marked
		Nephropathy	Chronic, Marked
[ Dilatation TGLS = 6-7 ]			
* Liver		Clear Cell Focus	Mild
[ Clear Cell Focus TGLS = 10-13 ]			
* Lung		Carcinoma	Metastatic (Uterus)
	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
[ Carcinoma TGLS = 1,2-4+5+14 ]			
Lymph Node	Deep Cervical	Hyperplasia	Lymphoid, Mild
[ Hyperplasia TGLS = 3-19 ]			
* Lymph Node, Bronchial		Carcinoma	Metastatic (Uterus)
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-10 ]			
Pleura		Carcinoma	Metastatic (Uterus)
		Inflammation	Chronic

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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<b>ANIMAL ID:</b> 735	<b>TRT#:</b> 7	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 735
	<b>DOSE:</b> 100 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 40551

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Skeletal Muscle [ Carcinoma TGLS = 9-20 ]		Carcinoma	Metastatic (Uterus)
* Uterus	Endometrium	Atrophy Carcinoma	Moderate

Note: end stage of cystic endometrial hyperplasia may be preferable term to hydrometra.  
[ Atrophy TGLS = 7-15 ]  
[ Carcinoma TGLS = 8-16+17 ]

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 736

TRT#: 7

SEX: Female

DAY ON TEST: 680

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40552

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Heart	Atrium	Thrombosis	Marked
* Kidney		Nephropathy	Chronic, Mild
* Liver		Congestion	Marked
[ Congestion TGLS = 3-6 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

- Heart Atrium Thrombosis

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 737

TRT#: 7

SEX: Female

DAY ON TEST: 735

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40553

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	Ear
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Nephropathy	Chronic, Minimal
* Liver	Clear Cell Focus	Mild
[ Clear Cell Focus TGLS = 3-6 ]		
* Mammary Gland	Fibroadenoma	
[ Fibroadenoma TGLS = 2-13 ]		
* Skin	Basal Cell Carcinoma	
[ Basal Cell Carcinoma TGLS = 1-14 ]		

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 738

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40554

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Heart		Cardiomyopathy	Mild
* Kidney	Papilla	Mineralization	Minimal
	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Mild
* Larynx		Inflammation	Chronic, Mild
	Epiglottis	Metaplasia	Squamous, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-13+14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 739

TRT#: 7

SEX: Female

DAY ON TEST: 735

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40555

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy Fibroadenoma	Mild Chronic, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 1-13 ]			
* Pituitary Gland [ Adenoma TGLS = 2-10 ]	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 740

TRT#: 7

SEX: Female

DAY ON TEST: 734

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40556

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-13 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 741

TRT#: 7

SEX: Female

DAY ON TEST: 735

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40557

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Minimal
* Uterus		Polyp Stromal	

[ Polyp Stromal TGLS = 1-10 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 742

TRT#: 7

SEX: Female

DAY ON TEST: 349

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40558

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Kidney
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Brain	Cerebrum	Gliosis	Marked
		Hemorrhage	Moderate
		Thrombosis	Marked
Note: Thrombi visible in choroid plexus vessels; presumably primary lesion is vascular, secondary gliosis.			
		[ Hemorrhage TGLS = 3-1 ]	
		[ Thrombosis TGLS = 3-1 ]	
* Liver		Vacuolization Cytoplasmic	Marked
Mesentery		Necrosis	Moderate
		[ Necrosis TGLS = 1-13 ]	
* Stomach, Forestomach		Hyperplasia	Squamous, Moderate
		Ulcer	Marked
		[ Ulcer TGLS = 4-10 ]	

PRIMARY CAUSE OF DEATH - Stomach, Forestomach Ulcer

CONTRIBUTORY CAUSE OF DEATH - Brain Thrombosis

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 743

TRT#: 7

SEX: Female

DAY ON TEST: 735

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40559

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 744

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 617

HISTO: 40560

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Medulla		Leukemia Mononuclear	
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-6 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mesenteric		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 5,6-8+15 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
[ Hyperplasia TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 745

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40561

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Heart	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Larynx	* Liver	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Adrenal Medulla		Pheochromocytoma Benign	
* Brain		Hemorrhage	Mild
Eye	Lens	Cataract	Moderate
[ Cataract TGLS = 1-13 ]			
* Kidney	Cortex, Renal Tubule	Hyperplasia	Minimal
	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Moderate
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Thyroid Gland	C Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 746

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40562

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy	Minimal Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Nose		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
* Pituitary Gland		Cyst	Marked
	Pars Distalis	Hyperplasia	Marked
[ Cyst TGLS = 1-10 ]			
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 747

TRT#: 7

SEX: Female

DAY ON TEST: 736

DOSE: 100 PPM

DISP: Terminal Sacrifice

HISTO: 40563

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Marked
* Liver		Vacuolization Cytoplasmic	Marked
[ Vacuolization Cytoplasmic TGLS = 2,4-13+6 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 748

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40564

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Brain		Compression	Moderate
* Clitoral Gland		Cyst	Marked
		Hyperplasia	Marked
[ Cyst TGLS = 1-9 ]			
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Marked
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-13 ]			
* Nose	Goblet Cell	Hyperplasia	Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 749

TRT#: 7

SEX: Female

DAY ON TEST: 688

DOSE: 100 PPM

DISP: Moribund Sacrifice

HISTO: 40565

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Brain		Carcinoma	Metastatic (Pituitary Gland)
		Compression	
		Hemorrhage	Mild
* Kidney		Nephropathy	Chronic, Moderate
* Pituitary Gland	Pars Distalis	Carcinoma	
	[ Carcinoma TGLS = 2-10 ]		

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Carcinoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 750

TRT#: 7

DOSE: 100 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40566

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Marked
* Brain		Compression	
* Kidney	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Mild
* Liver		Leukemia Mononuclear	
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Galactocele	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura	Mesothelium	Hyperplasia	Minimal
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 901

TRT#: 9

SEX: Female

DAY ON TEST: 478

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40417

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
* Lung		Carcinoma	Metastatic (Uterus)
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 1-13 ]			
* Uterus	Endometrium	Carcinoma	
[ Carcinoma TGLS = 3-16 ]		Sarcoma Stromal	
[ Sarcoma Stromal TGLS = 2,4-14+15 ]			

PRIMARY CAUSE OF DEATH

- Uterus Endometrium Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 902

TRT#: 9

SEX: Female

DAY ON TEST: 618

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40418

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Clitoral Gland [ Carcinoma TGLS = 1-13+14 ]	Carcinoma	
* Kidney  Note: Large amounts of eosinophilic droplets in cortical tubules, larger than those seen with alpha2globulin in males. [ Cytoplasmic Alteration TGLS = 2-7 ]	Cytoplasmic Alteration Nephropathy	Marked Chronic, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 1-13 ]	Fibroadenoma	

PRIMARY CAUSE OF DEATH

- Clitoral Gland Carcinoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 903

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40419

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 904

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40420

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 905

TRT#: 9

SEX: Female

DAY ON TEST: 590

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40421

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitial	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Proteinosis	Minimal
[ Fibrosis TGLS = 2-15 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13+14 ]			
Pleura		Inflammation	Chronic, Moderate
[ Inflammation TGLS = 2-15 ]			

PRIMARY CAUSE OF DEATH - Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 906

TRT#: 9

DOSE: 400 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 589

HISTO: 40422

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Lung	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Larynx		Foreign Body	Moderate
		Inflammation	Suppurative, Mild
* Liver		Leukemia Mononuclear	
Lymph Node	Thoracic	Hyperplasia	Plasma Cell, Marked
[ Hyperplasia TGLS = 2-16 ]			
* Lymph Node, Mediastinal		Hyperplasia	Plasma Cell, Moderate
Note: Thoracic is choice closest to axillary. Please add axillary as site.			
[ Hyperplasia TGLS = 3-17 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13+14+15 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-18 ]			
Pleura		Inflammation	Chronic, Moderate
* Skin		Ulcer	Marked
[ Ulcer TGLS = 5-14+15 ]			
* Spleen		Hematopoietic Cell Proliferation	Marked
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 6-10 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:05

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 906

**TRT#:** 9

**SEX:** Female

**DAY ON TEST:** 589

**DOSE:** 400 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40422

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

CONTRIBUTORY CAUSE OF DEATH

- Skin Ulcer

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 907

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40423

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
Eye	Antr Chamber	Hemorrhage	Moderate
[ Hemorrhage TGLS = 2-13 ]			
* Kidney	Cortex, Renal Tubule	Hyperplasia	Moderate
		Nephropathy	Chronic, Moderate
[ Hyperplasia TGLS = 5-14 ]			
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 4-19 ]			
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-15+16 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 8-10 ]			
* Uterus		Polyp Stromal	
Note: tgl 3 is degenerated mass in lumen, much collagenous stroma visible with polarized light. diff dx fibroma.			
[ Polyp Stromal TGLS = 3-20 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 908

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40424

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe Pelvis	Hyperplasia Mineralization Nephropathy	Mild Moderate Chronic, Mild
* Lung	Interstitium Mediastinum Mediastinum	Fibrosis Hyperplasia Pigmentation	Mild Histiocytic, Moderate Mild
* Nose	Alveolus Goblet Cell Respirat Epith	Proteinosis Hyperplasia Hyperplasia	Minimal Mild Mild
* Pituitary Gland [ Adenoma TGLS = 5-10 ]	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Moderate
* Skin [ Erosion TGLS = 4-14 ] [ Neural Crest Tumor TGLS = 3-13 ]	Subcut Tiss	Erosion Neural Crest Tumor	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 909

TRT#: 9

DOSE: 400 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 590

HISTO: 40425

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Trachea	* Urinary Bladder

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
* Nose	Respirat Epith	Hyperplasia	Minimal
* Pituitary Gland	Pars Distalis	Hyperplasia	Mild
* Thyroid Gland	C Cell	Adenoma	
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-13 ]			

PRIMARY CAUSE OF DEATH

- Mammary Gland Fibroadenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 910

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40426

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver
* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
Vagina			

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Mild
* Kidney		Nephropathy	Chronic, Mild
* Larynx		Inflammation	Chronic, Moderate
* Lung	Interstitium	Fibrosis	Moderate
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Alveolus	Proteinosis	Moderate
[ Fibrosis TGLS = 3-13 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 4-15 ]			
* Nose	Olfactory Epi	Degeneration	Hyaline, Moderate
Pleura		Inflammation	Chronic, Moderate
[ Inflammation TGLS = 3-13 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-14 ]			

PRIMARY CAUSE OF DEATH

-

Animal Note: TGL 1 = No Corresponding Lesion (NCL)

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 911

TRT#: 9

SEX: Female

DAY ON TEST: 538

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40427

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Cortex		Necrosis	Marked
* Kidney		Nephropathy	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
	[ Hepatodiaphragmatic Nodule TGLS = 3-14 ]		
* Lymph Node, Bronchial		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 1-13 ]		
* Nose	Goblet Cell	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
* Spleen		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 2-15 ]		

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 912

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40428

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Parathyroid Gland	* Pituitary Gland
* Salivary Glands	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Minimal
	Interstitium	Inflammation	Chronic, Minimal
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3-14+15+16+17 ]			
* Pancreas	Acinus	Atrophy	Moderate
Pleura		Inflammation	Chronic, Minimal
[ Inflammation TGLS = 4-18 ]			
* Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-13 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 913

TRT#: 9

DOSE: 400 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40429

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 1-14 ]			
* Lung	Interstitium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
Pleura		Inflammation	Chronic, Moderate
[ Inflammation TGLS = 2-13 ]			
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 914

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40430

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Lung	Interstitium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
[ Infiltration Cellular TGLS = 4-16 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 2,3-13+14+15 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Pleura		Inflammation	Chronic, Mild
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 1-17 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 915

TRT#: 9

SEX: Female

DAY ON TEST: 702

DOSE: 400 PPM

DISP: Natural Death

HISTO: 40431

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Islets, Pancreatic	* Larynx	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Brain		Hemorrhage	Marked
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Carcinoma	
[ Carcinoma TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Brain Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 916

TRT#: 9

SEX: Female

DAY ON TEST: 644

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40432

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Brain		Carcinoma	Metastatic (Pituitary Gland)
		Hemorrhage	Moderate
* Kidney		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
		Leukemia Mononuclear	
[ Hepatodiaphragmatic Nodule TGLS = 6-15 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Carcinoma	
[ Carcinoma TGLS = 3-10 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-14 ]			
Vagina	Epithelium	Hyperplasia	Moderate
[ Hyperplasia TGLS = 5-16 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Carcinoma

CONTRIBUTORY CAUSE OF DEATH - Brain Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 917

TRT#: 9

SEX: Female

DAY ON TEST: 644

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40433

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Clitoral Gland	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Liver	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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INSUFFICIENT TISSUE

\* Larynx

OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Brain		Hemorrhage	Moderate
* Kidney	Papilla	Mineralization	Mild
		Nephropathy	Chronic, Mild
* Lung	Interstitium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic
Tongue	Epithelium	Hyperplasia	Moderate
[ Hyperplasia TGLS = 2-13 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH

- Brain Hemorrhage

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 918

TRT#: 9

SEX: Female

DAY ON TEST: 694

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40434

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-6 ]			
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Nose		Inflammation	Suppurative, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Mild
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 919

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40435

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Ovary	* Pancreas
* Salivary Glands	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy	Minimal Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule Leukemia Mononuclear	Marked
	[ Hepatodiaphragmatic Nodule TGLS = 5-20 ]		
* Lung	Interstitium Alveolus	Fibrosis Infiltration Cellular Leukemia Mononuclear	Moderate Histiocyte, Mild
	Alveolus	Proteinosis	Moderate
	[ Fibrosis TGLS = 8-19 ]		
* Lymph Node, Mesenteric		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 7-21 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 2-14+15 ]		
Mesentery		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-13 ]		
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 4-10 ]		
Pleura		Inflammation	Chronic, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:05

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 919

**TRT#:** 9

**SEX:** Female

**DAY ON TEST:** 735

**DOSE:** 400 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40435

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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* Skin [ Fibroma TGLS = 3-16+17+18 ]	Subcut Tiss	Fibroma	
* Spleen		Leukemia Mononuclear	
* Thyroid Gland	C Cell	Hyperplasia	Marked

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 920

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40436

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Minimal
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
* Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 921

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40437

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Moderate
* Lung	Interstitial	Fibrosis	Moderate
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Moderate
[ Fibrosis TGLS = 6,7-14+15 ]			
[ Infiltration Cellular TGLS = 3-5 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Moderate
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 5-16 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 922

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40438

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Clitoral Gland		Hyperplasia	Moderate
		Inflammation	Chronic, Marked
* Kidney	Pelvis	Mineralization	Mild
		Nephropathy	Chronic, Minimal
* Lung	Interstitialium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
* Mammary Gland		Carcinoma	
		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-13 ]		
Pleura		Inflammation	Chronic, Mild
	[ Inflammation TGLS = 2-14 ]		
* Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 923

TRT#: 9

SEX: Female

DAY ON TEST: 708

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40439

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
-------------------------	--------------------------

OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 924

TRT#: 9

SEX: Female

DAY ON TEST: 566

DOSE: 400 PPM

DISP: Natural Death

HISTO: 40440

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Islets, Pancreatic	* Larynx	* Lung
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland	* Nose
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

Eye [ Hyperplasia TGLS = 4-14 ]	Cornea	Hyperplasia	Minimal
* Kidney		Nephropathy	Chronic, Minimal
* Liver [ Clear Cell Focus TGLS = 5-13 ]		Clear Cell Focus	Moderate
* Ovary [ Cyst TGLS = 3-9 ]		Cyst	Mild
* Pituitary Gland [ Adenoma TGLS = 2-10 ]	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 925

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40441

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Bronchial	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Pituitary Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 1-6 ]			
* Lung	Interstitial	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Interstitial	Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Mild
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2,3-15+16 ]			
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 4,5,6-13+14 ]			
* Spleen		Leukemia Mononuclear	
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 926

TRT#: 9

DOSE: 400 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40442

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Hyperplasia	Marked
Eye	Lens	Cataract	Moderate
[ Cataract TGLS = 1-14 ]			
* Kidney	Papilla	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Interstitium	Inflammation	Chronic, Mild
	Alveolus	Proteinosis	Mild
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3-15 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Moderate
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 4-13 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 927

TRT#: 9

SEX: Female

DAY ON TEST: 734

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40443

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Larynx	Squam Epithel	Hyperplasia	Mild
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Proteinosis	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Minimal
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 2-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 928

TRT#: 9

DOSE: 400 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 706

HISTO: 40444

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney		Nephropathy	Chronic, Marked
* Larynx		Inflammation	Chronic, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
* Liver		Leukemia Mononuclear	
* Lung	Interstitial	Fibrosis	Moderate
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Interstitial	Inflammation	Chronic, Moderate
	Alveolus	Leukemia Mononuclear	
		Proteinosis	Moderate
Note: liver tissue in lung is interpreted as articial.			
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 4-13 ]		
* Pituitary Gland		Hemorrhage	Marked
	[ Hemorrhage TGLS = 3-10 ]		
Pleura	Mesothelium	Hyperplasia	Mild
		Inflammation	Chronic, Moderate
	[ Inflammation TGLS = 5,6,7-14+15+16 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:05

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 928

**TRT#:** 9

**SEX:** Female

**DAY ON TEST:** 706

**DOSE:** 400 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40444

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* Spleen

Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

- Pituitary Gland Hemorrhage

CONTRIBUTORY CAUSE OF DEATH

- Brain Compression

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 929

TRT#: 9

SEX: Female

DAY ON TEST: 734

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40445

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Esophagus	* Heart	* Intestine Large, Cecum
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum
* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx	* Liver
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Medulla		Pheochromocytoma Benign	
* Clitoral Gland		Cyst	Moderate
		Hyperplasia	Marked
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Moderate
* Lung	Alveolar Epith	Hyperplasia	Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 3-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Spleen		Accessory Spleen	
[ Accessory Spleen TGLS = 2-13 ]			
* Uterus		Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 930

TRT#: 9

SEX: Female

DAY ON TEST: 492

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40446

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
Pleura	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Brain		Hemorrhage	Mild
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
Oral Mucosa	Pharyngeal	Hyperplasia	Squamous, Moderate
Note: focal hyperplasia of epith lining palate in nasal xs2 on slide 12.			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 2-10 ]			
* Stomach, Forestomach		Erosion	Marked
[ Erosion TGLS = 3-13 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

CONTRIBUTORY CAUSE OF DEATH - Stomach;Forestomach Erosion

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 931

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Clitoral Gland [ Hyperplasia TGLS = 5-16 ]		Hyperplasia	Marked
* Kidney	Cortex, Renal Tubule Papilla	Hyperplasia Mineralization Nephropathy	Minimal Minimal Chronic, Marked
* Larynx		Inflammation	Suppurative, Moderate
* Liver [ Angiectasis TGLS = 2-14 ]		Angiectasis	Mild
* Lung	Interstitium Alveolus Alveolar Epith Alveolus	Fibrosis Infiltration Cellular Metaplasia Proteinosis Necrosis	Mild Histiocyte, Mild Squamous, Minimal Minimal Moderate
Mesentery [ Necrosis TGLS = 4-13 ]			
* Pituitary Gland [ Adenoma TGLS = 1-10 ]	Pars Distalis	Adenoma	
* Uterus [ Polyp Stromal TGLS = 3-15 ]		Polyp Stromal	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 931

**TRT#:** 9  
**DOSE:** 400 PPM

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 736  
**HISTO:** 40447

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 932

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- |                             |                          |                            |                           |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex            | * Adrenal Medulla        | Blood Vessel               | * Bone                    |
| * Bone Marrow               | * Brain                  | * Clitoral Gland           | * Esophagus               |
| * Heart                     | * Intestine Large, Cecum | * Intestine Large, Colon   | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic      |
| * Larynx                    | * Liver                  | * Lung                     | * Lymph Node, Mediastinal |
| * Lymph Node, Mesenteric    | * Nose                   | * Ovary                    | * Pancreas                |
| * Parathyroid Gland         | * Salivary Glands        | * Skin                     | * Spleen                  |
| * Stomach, Forestomach      | * Stomach, Glandular     | * Thymus                   | * Thyroid Gland           |
| * Trachea                   | * Urinary Bladder        | * Uterus                   |                           |

MISSING

- |                          |        |
|--------------------------|--------|
| * Lymph Node, Mandibular | Vagina |
|--------------------------|--------|

OBSERVATIONS

- |                                      |               |                |                  |
|--------------------------------------|---------------|----------------|------------------|
| * Kidney                             | Pelvis        | Mineralization | Minimal          |
|                                      |               | Nephropathy    | Chronic, Minimal |
| * Lymph Node, Bronchial              |               | Pigmentation   | Moderate         |
| * Mammary Gland                      |               | Fibroadenoma   | Multiple         |
| [ Fibroadenoma TGLS = 2,3-13+14+15 ] |               |                |                  |
| * Pituitary Gland                    | Pars Distalis | Adenoma        |                  |
| [ Adenoma TGLS = 1-10 ]              |               |                |                  |

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 933

TRT#: 9

DOSE: 400 PPM

SEX: Female

DISP: Moribund Sacrifice

DAY ON TEST: 634

HISTO: 40449

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Stomach, Forestomach	* Stomach, Glandular
* Thymus	* Thyroid Gland	* Trachea	* Urinary Bladder
* Uterus			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	Vagina
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Kidney		Nephropathy	Chronic, Mild
	Renal Tubule	Pigmentation	Marked
* Liver		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 6-6 ]		
* Lung	Interstitial	Fibrosis	Moderate
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Leukemia Mononuclear	
	Alveolus	Proteinosis	Mild
	[ Leukemia Mononuclear TGLS = 8-4+5 ]		
* Mammary Gland		Fibroadenoma	
	[ Fibroadenoma TGLS = 1-16 ]		
Mesentery		Necrosis	Moderate
	[ Necrosis TGLS = 5-15 ]		
* Nose		Foreign Body	
		Inflammation	Suppurative, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
	[ Adenoma TGLS = 7-10 ]		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07

**Test Type:** CHRONIC

**Route:** RESPIRATORY EXPOSURE WHOLE BODY

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin

**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014

**Time Report Requested:** 16:06:05

**First Dose M/F:** NA / NA

**Lab:** BNW

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**ANIMAL ID:** 933

**TRT#:** 9

**SEX:** Female

**DAY ON TEST:** 634

**DOSE:** 400 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40449

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pleura	Mesothelium	Hyperplasia	Mild
		Inflammation	Chronic
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	

[ Fibrosis TGLS = 4-14 ]

[ Leukemia Mononuclear TGLS = 3-13 ]

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PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

CONTRIBUTORY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 934

TRT#: 9

SEX: Female

DAY ON TEST: 602

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40450

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Lung	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Brain		Compression	Moderate
* Kidney		Nephropathy	Chronic, Minimal
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
* Stomach, Forestomach		Hyperplasia	Squamous, Mild

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 935

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40451

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Spleen	* Stomach, Forestomach	* Stomach, Glandular
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial Vagina	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Moderate
* Lung	Interstitialium	Fibrosis	Moderate
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
[ Fibrosis TGLS = 4-5 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 2-14 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
Pleura		Inflammation	Chronic, Mild
* Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 936

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40452

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Mild
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Alveolus	Proteinosis	Mild
[ Hyperplasia TGLS = 2-14 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 4-13 ]			
* Pituitary Gland	Pars Distalis	Hyperplasia	Marked
[ Hyperplasia TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild
* Uterus		Hemorrhage	Marked
[ Hemorrhage TGLS = 3-15 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 937

TRT#: 9

SEX: Female

DAY ON TEST: 708

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40453

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mesenteric	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder		

MISSING

\* Lymph Node, Mandibular

OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
* Lung	Interstitialium	Fibrosis	Minimal
	Alveolar Epith	Foreign Body	Mild
		Hyperplasia	Minimal
	Alveolar Epith	Leukemia Mononuclear	
		Metaplasia	Squamous, Minimal
* Lymph Node, Bronchial		Leukemia Mononuclear	
* Lymph Node, Mediastinal		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 4-10 ]			
Pleura		Inflammation	Chronic, Minimal
[ Inflammation TGLS = 3-13 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 2-14 ]			
* Uterus	Endometrium	Hyperplasia	Marked

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 938

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40454

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Mammary Gland
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Salivary Glands	* Skin	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Moderate
* Larynx		Foreign Body	Mild
		Inflammation	Suppurative, Minimal
* Lung	Interstitial	Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Minimal
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			
Pleura		Inflammation	Chronic, Mild
[ Inflammation TGLS = 2-13 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 939

TRT#: 9

SEX: Female

DAY ON TEST: 699

DOSE: 400 PPM

DISP: Natural Death

HISTO: 40455

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	* Bone	* Bone Marrow	* Clitoral Gland
* Esophagus	* Heart	* Ovary	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Thyroid Gland
* Urinary Bladder			

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Adrenal Cortex	* Adrenal Medulla	* Intestine Large, Cecum	* Intestine Large, Colon
* Intestine Large, Rectum	* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum
* Islets, Pancreatic	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Pancreas	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Trachea			

INSUFFICIENT TISSUE

\* Larynx

OBSERVATIONS

* Brain		Hemorrhage	Moderate
* Kidney	Pelvis, Transit Epithe	Carcinoma	
Note: Autolysis makes it hard to determine if site of tumor is renal tubule or trans. epithelium. Cellular pattern indicates trans epith origin. [ Carcinoma TGLS = 4-7 ]			
* Liver		Leukemia Mononuclear	
* Lung		Leukemia Mononuclear	
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-14+15 ]			
* Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-13 ]			
* Uterus		Polyp Stromal	
[ Polyp Stromal TGLS = 5-10 ]			

PRIMARY CAUSE OF DEATH

- Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 940

TRT#: 9

DOSE: 400 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 40456

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Liver	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Pituitary Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial Vagina	* Lymph Node, Mandibular	* Lymph Node, Mediastinal	* Thymus
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Kidney		Nephropathy	Chronic, Minimal
* Lung	Interstitialium	Fibrosis	Moderate
	Alveolar Epith	Hyperplasia	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
	Alveolus	Leukemia Mononuclear	
		Proteinosis	Moderate
[ Fibrosis TGLS = 4-13 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
Pleura		Inflammation	Chronic
* Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
[ Fibrosis TGLS = 3-14 ]			
[ Leukemia Mononuclear TGLS = 2-15 ]			
* Thyroid Gland	C Cell	Adenoma	
[ Adenoma TGLS = 1-3 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 941

TRT#: 9

SEX: Female

DAY ON TEST: 561

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40457

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Mammary Gland	* Nose	* Pancreas
* Pituitary Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland	Vagina
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Liver		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-6 ]			
* Lung	Interstitialium	Fibrosis	Moderate
	Alveolus	Infiltration Cellular	Histiocyte, Moderate
		Leukemia Mononuclear	
	Alveolus	Pigmentation	Marked
[ Infiltration Cellular TGLS = 3-4+5 ]			
[ Leukemia Mononuclear TGLS = 3-4+5 ]			
* Lymph Node, Mediastinal		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-3 ]			
* Lymph Node, Mesenteric		Leukemia Mononuclear	
* Ovary		Cyst	Moderate
[ Cyst TGLS = 5-9 ]			
* Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
[ Fibrosis TGLS = 2-13 ]			
[ Leukemia Mononuclear TGLS = 1-14 ]			

PRIMARY CAUSE OF DEATH - Spleen Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 941

**TRT#:** 9

**SEX:** Female

**DAY ON TEST:** 561

**DOSE:** 400 PPM

**DISP:** Moribund Sacrifice

**HISTO:** 40457

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 942

TRT#: 9

SEX: Female

DAY ON TEST: 734

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40458

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Nose	* Ovary	* Pancreas	* Parathyroid Gland
* Pituitary Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina	
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OBSERVATIONS

* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Lung	Interstitial	Fibrosis	Mild
	Alveolar Epith	Hyperplasia	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
	Alveolus	Proteinosis	Mild
[ Fibrosis TGLS = 2-13 ]			
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14 ]			
Pleura		Inflammation	Chronic, Moderate
[ Inflammation TGLS = 2-13 ]			
* Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 943

TRT#: 9

SEX: Female

DAY ON TEST: 700

DOSE: 400 PPM

DISP: Moribund Sacrifice

HISTO: 40459

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Moderate
* Kidney	Pelvis	Dilatation	Marked
	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Mild
[ Dilatation TGLS = 4-7 ]			
* Liver		Clear Cell Focus	Moderate
[ Clear Cell Focus TGLS = 8-6 ]			
* Lung	Interstitium	Fibrosis	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Lymph Node, Mediastinal		Angiectasis	Marked
[ Angiectasis TGLS = 2-3 ]			
* Mammary Gland		Galactoceles	Marked
[ Galactoceles TGLS = 1,6,7-13+14+15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-10 ]			

PRIMARY CAUSE OF DEATH - Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 944

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40460

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Spleen	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney	Pelvis	Mineralization Nephropathy Fibroadenoma	Minimal Chronic, Minimal
* Mammary Gland [ Fibroadenoma TGLS = 2-14 ]			
Mesentery [ Necrosis TGLS = 3-15 ]		Necrosis	Moderate
* Pituitary Gland [ Adenoma TGLS = 4-10 ]	Pars Distalis	Adenoma	
* Skin [ Basal Cell Adenoma TGLS = 1-13 ]		Basal Cell Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 945

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40461

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Medulla	Blood Vessel	* Bone	* Bone Marrow
* Brain	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic	* Larynx
* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Stomach, Forestomach
* Stomach, Glandular	* Thymus	* Thyroid Gland	* Trachea
* Urinary Bladder	* Uterus		

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Adrenal Cortex		Vacuolization Cytoplasmic	Mild
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Liver		Hepatodiaphragmatic Nodule	Marked
[ Hepatodiaphragmatic Nodule TGLS = 4-16 ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-13+14+15 ]			
* Ovary		Cyst	Marked
[ Cyst TGLS = 3-9 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 5-10 ]			
* Spleen		Hematopoietic Cell Proliferation	Marked
[ Hematopoietic Cell Proliferation TGLS = 2-17 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 946

TRT#: 9

SEX: Female

DAY ON TEST: 735

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40462

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular
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OBSERVATIONS

* Kidney		Nephropathy	Chronic, Minimal
* Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 2-13+14+15 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 1-10 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 947

TRT#: 9

SEX: Female

DAY ON TEST: 580

DOSE: 400 PPM

DISP: Natural Death

HISTO: 40463

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Islets, Pancreatic	* Liver	* Lung	* Lymph Node, Mediastinal
* Lymph Node, Mesenteric	* Mammary Gland	* Nose	* Ovary
* Pancreas	* Parathyroid Gland	* Salivary Glands	* Skin
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum
* Intestine Small, Ileum	* Intestine Small, Jejunum		

OBSERVATIONS

* Brain		Hemorrhage	Moderate
* Kidney	Pelvis	Mineralization	Minimal
		Nephropathy	Chronic, Minimal
* Larynx		Foreign Body	Moderate
		Inflammation	Suppurative, Moderate
Lymph Node	Deep Cervical	Ectasia	Marked
[ Ectasia TGLS = 2-13 ]			
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 3-10 ]			
* Spleen		Necrosis	Marked
[ Necrosis TGLS = 5-15 ]			

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 948

TRT#: 9

SEX: Female

DAY ON TEST: 736

DOSE: 400 PPM

DISP: Terminal Sacrifice

HISTO: 40464

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric	* Nose
* Ovary	* Pancreas	* Parathyroid Gland	* Salivary Glands
* Skin	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina	
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OBSERVATIONS

Eye [ Cataract TGLS = 1-13 ]	Lens	Cataract	Marked
* Kidney	Pelvis	Mineralization Nephropathy	Mild Chronic, Minimal
* Liver [ Hepatodiaphragmatic Nodule TGLS = 4-15 ] [ Leukemia Mononuclear TGLS = 3-6 ]		Hepatodiaphragmatic Nodule Leukemia Mononuclear	Marked
* Lung [ Hyperplasia TGLS = 5-14 ] [ Proteinosis TGLS = 5-14 ]	Interstitium Alveolar Epith Alveolus Alveolus	Fibrosis Hyperplasia Infiltration Cellular Proteinosis	Moderate Moderate Histiocyte, Moderate Marked
* Mammary Gland Note: mammary ca adjacent to clitoral gland on slide 9		Carcinoma	
* Pituitary Gland [ Adenoma TGLS = 2-10 ]	Pars Distalis	Adenoma	
Pleura		Inflammation	Chronic, Marked

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 948

**TRT#:** 9  
**DOSE:** 400 PPM

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 736  
**HISTO:** 40464

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Inflammation TGLS = 5-14 ]

\* Spleen

\* Uterus

[ Polyp Stromal TGLS = 6-16 ]

Leukemia Mononuclear

Polyp Stromal

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PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 93026-07

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Date Report Requested: 10/18/2014

Test Type: CHRONIC

Test Compound: Decalin

Time Report Requested: 16:06:05

Route: RESPIRATORY EXPOSURE WHOLE BODY

CAS Number: 91-17-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BNW

ANIMAL ID: 949

TRT#: 9

SEX: Female

DAY ON TEST: 538

DOSE: 400 PPM

DISP: Natural Death

HISTO: 40465

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Clitoral Gland	* Esophagus	* Heart
* Intestine Large, Colon	* Intestine Large, Rectum	* Intestine Small, Duodenum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Mammary Gland	* Nose	* Ovary	* Pancreas
* Parathyroid Gland	* Salivary Glands	* Skin	* Spleen
* Stomach, Forestomach	* Stomach, Glandular	* Thymus	* Thyroid Gland
* Trachea	* Urinary Bladder	* Uterus	

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	Vagina
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AUTO PRECLUDES DIAG.

* Intestine Large, Cecum	* Intestine Small, Ileum	* Intestine Small, Jejunum
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OBSERVATIONS

* Brain [ Compression TGLS = 3-1 ]		Compression	Marked
* Kidney		Nephropathy	Chronic, Minimal
* Lung		Congestion	Mild
	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Pituitary Gland [ Adenoma TGLS = 2-10 ]	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

- Pituitary Gland Pars Distalis Adenoma

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 93026-07

Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Decalin

CAS Number: 91-17-8

Date Report Requested: 10/18/2014

Time Report Requested: 16:06:05

First Dose M/F: NA / NA

Lab: BNW

ANIMAL ID: 950

TRT#: 9

DOSE: 400 PPM

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 40466

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex	* Adrenal Medulla	Blood Vessel	* Bone
* Bone Marrow	* Brain	* Clitoral Gland	* Esophagus
* Heart	* Intestine Large, Cecum	* Intestine Large, Colon	* Intestine Large, Rectum
* Intestine Small, Duodenum	* Intestine Small, Ileum	* Intestine Small, Jejunum	* Islets, Pancreatic
* Larynx	* Liver	* Lymph Node, Mediastinal	* Lymph Node, Mesenteric
* Ovary	* Pancreas	* Salivary Glands	* Skin
* Spleen	* Stomach, Forestomach	* Stomach, Glandular	* Thymus
* Thyroid Gland	* Trachea	* Urinary Bladder	* Uterus

MISSING

* Lymph Node, Bronchial	* Lymph Node, Mandibular	* Parathyroid Gland	Vagina
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OBSERVATIONS

* Kidney	Pelvis, Transit Epithe Papilla Pelvis	Hyperplasia Mineralization Mineralization Nephropathy	Mild Minimal Minimal Chronic, Mild
* Lung	Interstitialium Alveolar Epith Alveolus Alveolus	Fibrosis Hyperplasia Infiltration Cellular Proteinosis	Mild Mild Histiocyte, Mild Moderate
[ Fibrosis TGLS = 7-18 ] [ Infiltration Cellular TGLS = 7-18 ]			
* Mammary Gland		Fibroadenoma	Multiple
[ Fibroadenoma TGLS = 1,2-13+16+17 ]			
Mesentery		Necrosis	Moderate
[ Necrosis TGLS = 3,4-14+15 ]			
* Nose	Nasolacrim Dct	Inflammation	Suppurative, Moderate
Oral Mucosa	Pharyngeal	Hyperplasia	Squamous, Mild
* Pituitary Gland	Pars Distalis	Adenoma	
[ Adenoma TGLS = 6-10 ]			
Pleura		Inflammation	Chronic

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 93026-07  
**Test Type:** CHRONIC  
**Route:** RESPIRATORY EXPOSURE WHOLE BODY  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Decalin  
**CAS Number:** 91-17-8

**Date Report Requested:** 10/18/2014  
**Time Report Requested:** 16:06:05  
**First Dose M/F:** NA / NA  
**Lab:** BNW

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**ANIMAL ID:** 950

**TRT#:** 9

**SEX:** Female

**DAY ON TEST:** 735

**DOSE:** 400 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 40466

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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**\*\* END OF REPORT \*\***