

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

C Number:	C07103B
Lock Date:	Not Entered.
Cage Range:	All
Date Range:	All
Reasons For Removal:	All
Removal Date Range:	All
Treatment Groups:	All
Study Gender:	Both
PWG Approval Date	05/28/1991

Experiment Number: 05090-01
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Test Compound: Coumarin
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Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 1 TRT#: 1 SEX: Male DAY ON TEST: 420
DOSE: VEHICLE CONTROL DISP: Moribund HISTO: 86001

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Testes	Thyroid Gland	Trachea	

MISSING

Mammary Gland	Pituitary Gland	Thymus
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 1-2			
Lymph Node	Mesenteric	Leukemia Mononuclear	
Mesentery	Fat	Leukemia Mononuclear	
Nose		Fungus	Marked
		Inflammation	Suppurative, Mild
Note: NOSE-NUMEROUS FRUITING BODIES. ASPERGILLUS.			
Pancreas		Leukemia Mononuclear	
Stomach	Glandular	Leukemia Mononuclear	
Thymus			
Note: THYMUS MAY BE IN TUMOR MASS.			
Urinary Bladder		Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

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Animal Note: LEUKEMIC CELLS IN VESSELS OF LIVER,HEART,SAL.GLD.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
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CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 2 **TRT#:** 1 **SEX:** Male **DAY ON TEST:** 729
DOSE: VEHICLE CONTROL **DISP:** Terminal Sacrifice **HISTO:** 860002

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Pancreas	Parathyroid Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Gland Note: [PHEOCHROM BGN] TGLs = 4-4	Medulla	Pheochromocytoma Benign	
Kidney		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Mild
Mammary Gland Note: [FIBROADENOMA] TGLs = 1-13 Note: SKIN MASS IS MAMMARY FIBROADENOMA.		Fibroadenoma	
Nose		Inflammation	Suppurative, Minimal
Pharynx Note: [PAPILLOMA SQUA] TGLs = 5-10		Squamous Cell Papilloma	
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland		Inflammation	Suppurative, Mild
Spleen Note: [DEVELOP MALFOR] TGLs = 3-2		Developmental Malformation	
Testes Note: [ADENOMA] TGLs = 2-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 3	TRT#: 1	SEX: Male	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860003

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Kidney	Renal Tubule	Adenoma	
		Nephropathy	Mild
Liver		Basophilic Focus	
		Developmental Malformation	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Note: [DEVELOP MALFOR] TGLs = 5-2			
Pancreas		Atrophy	Moderate
Spleen		Congestion	Moderate
Note: [CONGESTION] TGLs = 4-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 4	TRT#: 1	SEX: Male	DAY ON TEST: 455
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860004

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	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			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-14			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: [ADENOMA] TGLs = 1-13			
Note: [HYPERPLASIA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 6	TRT#: 1	SEX: Male	DAY ON TEST: 730
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860006

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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 - Mesenteric

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Intermed	Hemorrhage	Mild
Testes	Interstit Cell	Adenoma	

Note: [ADENOMA] TGLs = 1-13,1-5

PRIMARY CAUSE OF DEATH

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Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 7	TRT#: 1	SEX: Male	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860007

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Clear Cell Focus	Mild
	Bile Duct	Hyperplasia	Mild
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:31

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 8

TRT#: 1

SEX: Male

DAY ON TEST: 456

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860008

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 1-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:31

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860009

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	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	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 4-1			
Liver		Basophilic Focus	
		Hepatocellular Carcinoma	
	Bile Duct	Hyperplasia	Mild
Lymph Node	Mandibular	Hyperplasia	Plasma Cell, Mild
Note: [HYPERPLASIA] TGLs = 1-9			
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 6-13			
Pituitary Gland	Pars Distalis	Adenoma	
Spleen		Hypoplasia	Moderate
Note: [HYPOPLASIA] TGLs = 3-2			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:31

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860010

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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 - Mesenteric	Mammary Gland	Nose
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Trachea			

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Leukemia Mononuclear	
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Moderate
		Hyperplasia	Moderate
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 8-2 [Leukemia Mononuclear TGLS = 7-2]			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-9 Note: [LEUKEMIA MONUC] TGLs = 9-9 Note: [LEUKEMIA MONUC] TGLs = 2-4			
Mesentery	Fat	Leukemia Mononuclear	
	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 5-14,6-14			
Pancreas		Leukemia Mononuclear	
Preputial Gland		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

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Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:31

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860010

ORGAN AND ACCOUNTABLE SITE STATUS

Spleen Leukemia Mononuclear

Note: [LEUKEMIA MONUC] TGLs = 3-2,4-2

Testes Interstit Cell Adenoma

Thymus Leukemia Mononuclear

Urinary Bladder Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 11	TRT#: 1	SEX: Male	DAY ON TEST: 660
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860011

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular	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	

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Islets, Pancreatic		Adenoma	
Note: [ADENOMA] TGLs = 1-17			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 2-13			
Testes	Interstitial Cell	Adenoma	
Thyroid Gland	C Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-9			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:31

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 12

TRT#: 1

SEX: Male

DAY ON TEST: 586

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860012

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver	Lung
Lymph Node	Nose	Pancreas	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Testes
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 3-1			
Mammary Gland		Galactocele	Moderate
Note: [GALACTOCELE] TGLs = 6-8			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 5-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-13			

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:31

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 13

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860013

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Seminal Vesicle
Stomach - Glandular

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Preputial Gland
Skin
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Trachea

OBSERVATIONS

Heart
Kidney
Liver

Cardiomyopathy
Nephropathy
Basophilic Focus
Hyperplasia
Infiltration Cellular

Mild
Mild
Mild
Lymphocyte, Mild

Bile Duct

Adenoma

Interstitial Cell

Carcinoma

C Cell

Note: [INFILTRAT CELL] TGLs = 2-2

Testes

Note: [ADENOMA] TGLs = 3-5

Thyroid Gland

Note: [CARCINOMA] TGLs = 1-9

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 14

TRT#: 1

SEX: Male

DAY ON TEST: 694

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860014

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Prostate	Salivary Glands
Seminal Vesicle	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland	Medulla	Basophilic Focus	Mild
Heart		Cardiomyopathy	Moderate
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-9 Note: [LEUKEMIA MONUC] TGLs = 6-14 [Leukemia Mononuclear TGLS = 5-14]			
Mesentery	Fat	Leukemia Mononuclear	
	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 7-15			
Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 8-4]			
Preputial Gland	Duct	Dilatation	Mild
Note: [DILATATION] TGLs = 1-5			
Skin		Cyst Epithelial Inclusion	
Note: [CYST EPITH INC] TGLs = 2-16			
Spleen		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:31
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 14

TRT#: 1

SEX: Male

DAY ON TEST: 694

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860014

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [LEUKEMIA MONUC] TGLs = 4-13

Testes

Interstit Cell

Adenoma

Note: [ADENOMA] TGLs = 9-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:31

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 15

TRT#: 1

SEX: Male

DAY ON TEST: 609

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860015

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Jejunum
Lymph Node - Mandibular
Pancreas
Salivary Glands
Stomach - Glandular

Adrenal Gland - Medulla
Epididymis
Intestine Large - Colon
Islets, Pancreatic
Lymph Node - Mesenteric
Pituitary Gland
Seminal Vesicle
Thymus

Bone
Esophagus
Intestine Large - Rectum
Liver
Mammary Gland
Preputial Gland
Spleen
Trachea

Bone Marrow
Heart
Intestine Small - Ileum
Lung
Nose
Prostate
Stomach - Forestomach
Urinary Bladder

OBSERVATIONS

Intestine Small
Note: [ULCER] TGLs = 8-13

Duodenum

Ulcer

Moderate

Kidney
Mammary GI
Note: #6 IS NOT MAMMARY BUT SUBCUTANEOUS FIBROMA

Nephropathy

Mild

Parathyroid Gland
Note: [HYPERPLASIA] TGLs = 1-9

Hyperplasia

Minimal

Skin
Note: [FIBROMA] TGLs = 6-15
Note: [PAPILLOMA SQUA] TGLs = 9-14

Subcut Tiss

Fibroma
Squamous Cell Papilloma

Testes
Note: [ADENOMA] TGLs = 3,4,5-5

Interstit Cell

Adenoma

Thyroid Gland
Note: [CYST] TGLs = 2-9

Follicle

Cyst

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 16

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860016

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pituitary Gland
Seminal Vesicle
Thyroid Gland

Adrenal Gland - Medulla
Epididymis
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Preputial Gland
Spleen
Trachea

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Pancreas
Prostate
Stomach - Forestomach
Urinary Bladder

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Parathyroid Gland
Salivary Glands
Stomach - Glandular

MISSING

Mammary Gland

OBSERVATIONS

Kidney
Liver

Nephropathy
Basophilic Focus
Clear Cell Focus

Mild

Nose
Skin

Inflammation
Cyst Epithelial Inclusion

Suppurative, Mild

Note: [CYST EPITH INC] TGLs = 1-13

Testes
Thymus

Interstit Cell

Adenoma
Sarcoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 17	TRT#: 1	SEX: Male	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860017

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Preputial Gland		Inflammation	Suppurative, Mild
Skin		Basal Cell Adenoma	
Note: [BASAL CEL ADEN] TGLs = 1-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5,3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 18	TRT#: 1	SEX: Male	DAY ON TEST: 730
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860018

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
Nose		Inflammation	Suppurative, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Hyperkeratosis	Mild
Note: [HYPERKERATOSIS] TGLs = 2-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 19

TRT#: 1

SEX: Male

DAY ON TEST: 453

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860019

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Inflammation	Chronic, Minimal
Nose		Inflammation	Suppurative, Minimal
Preputial Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 2-13			
Testes	Interstit Cell	Hyperplasia	Mild
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 20

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860020

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Mesentery
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Basophilic Focus	Mild
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
Note: [BASOPH FOCUS] TGLs = 4-2			
Mesentery			
Note: MESENTERIC MASS IS NORMAL ADIPOSE TISSUE.			
Nose		Inflammation	Suppurative, Minimal
Pancreas		Atrophy	Mild
Preputial Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 1-5			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 21

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860021

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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

INSUFFICIENT TISSUE

Lymph Node - Mesenteric

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Clear Cell Focus	Mild
	Bile Duct	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Cyst	Mild
Testes	Interstit Cell	Adenoma	

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 22

TRT#: 1

SEX: Male

DAY ON TEST: 513

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860022

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Brain	Hypothalamus	Compression	Moderate
Kidney	Cortex	Cyst	Marked
		Nephropathy	Mild
Note: [CYST] TGLs = 2-1			
Liver	Bile Duct	Hyperplasia	Minimal
		Infiltration Cellular	Lymphocyte, Mild
Lung	Alveolar Epith	Hyperplasia	Minimal
Parathyroid Gland		Adenoma	
Pituitary Gland	Pars Distalis	Adenoma	
Note: PITUITARY MASS COMPRESSES CEREBRAL PEDUNCLE & HYPOTHALMUS.			
Note: [ADENOMA] TGLs = 3-4			
Preputial Gland		Inflammation	Suppurative, Moderate
Note: SUBQ. INGUINAL MASS IS PREPUTIAL ABCESS.			
Note: [INFLAMMATION] TGLs = 1-13			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 23

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860023

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Mammary Gland
Prostate
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Lung
Nose
Salivary Glands
Stomach - Forestomach
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Lymph Node - Mandibular
Parathyroid Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mesenteric
Pituitary Gland
Skin
Thymus

OBSERVATIONS

Heart
Islets, Pancreatic
Kidney
Liver

Bile Duct

Pancreas
Preputial Gland
Note: [ADENOMA] TGLs = 1-13

Acinar Cell

Testes
Note: [ADENOMA] TGLs = 2-5,3-5

Interstit Cell

Cardiomyopathy
Adenoma
Nephropathy
Basophilic Focus
Hyperplasia
Mixed Cell Focus
Hyperplasia
Adenoma

Adenoma

Mild

Minimal
Minimal

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 24	TRT#: 1	SEX: Male	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860024

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 4-1]			
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Skin		Cyst Epithelial Inclusion	
	Subcut Tiss	Fibroma	
Note: [FIBROMA] TGLs = 2-13			
Note: [CYST EPITH INC] TGLs = 1-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5,5-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 25

TRT#: 1

SEX: Male

DAY ON TEST: 455

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860025

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Liver
Mammary Gland
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lung
Nose
Preputial Gland
Skin
Thymus

OBSERVATIONS

Heart
Kidney
Testes
Note: [ADENOMA] TGLs = 1-5

Interstit Cell

Cardiomyopathy
Nephropathy
Adenoma

Mild
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 26	TRT#: 1	SEX: Male	DAY ON TEST: 730
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860026

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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 Gland	Medulla	Pheochromocytoma Benign	
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 3-1]			
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 4-4]			
Testes	Interstitial Cell	Adenoma	
	Seminif Tub	Atrophy	Moderate
Note: [ADENOMA] TGLs = 1-5			
[Adenoma TGLS = 2-5]			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 27	TRT#: 1	SEX: Male	DAY ON TEST: 623
	DOSE: VEHICLE CONTROL	DISP: Dead	HISTO: 860027

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Intestine Small - Duodenum	Islets, Pancreatic
Lung	Mammary Gland	Pancreas	Parathyroid Gland
Pituitary Gland	Salivary Glands	Skin	Spleen
Thymus	Thyroid Gland	Trachea	

MISSING

Epididymis	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Ileum	Intestine Small - Jejunum	Lymph Node - Mesenteric	Preputial Gland
Prostate	Seminal Vesicle	Testes	Urinary Bladder

AUTO PRECLUDES DIAG.

Stomach - Glandular

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Fatty Change	Mild
	Bile Duct	Hyperplasia	Minimal
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Moderate
Note: [HYPERPLASIA] TGLs = 1-9			
Nose		Inflammation	Suppurative, Minimal
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-6			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 28

TRT#: 1

SEX: Male

DAY ON TEST: 704

DOSE: VEHICLE CONTROL

DISP: Dead

HISTO: 860028

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Bone	Bone Marrow	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Islets, Pancreatic	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Salivary Glands
Skin	Spleen	Thymus	Trachea

MISSING

Epididymis	Intestine Large - Rectum	Intestine Small - Ileum	Mammary Gland
Parathyroid Gland	Preputial Gland	Prostate	Seminal Vesicle
Testes	Urinary Bladder		

AUTO PRECLUDES DIAG.

Brain	Intestine Small - Duodenum	Intestine Small - Jejunum	Thyroid Gland
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OBSERVATIONS

Adrenal Gland Note: [CONGESTION] TGLs = 1-4	Medulla	Congestion	Moderate
Heart		Cardiomyopathy	Moderate
Kidney [Nephropathy TGLS = 2-1]	Renal Tubule	Hyperplasia Nephropathy	Minimal Marked
Liver	Bile Duct	Hyperplasia	Mild
Pancreas		Atrophy	Mild
Pituitary Gland Note: [ADENOMA] TGLs = 3-4	Pars Distalis	Adenoma	
Stomach Note: [ULCER] TGLs = 4-13	Forestomach Glandular	Ulcer Ulcer	Mild Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 29	TRT#: 1	SEX: Male	DAY ON TEST: 699
	DOSE: VEHICLE CONTROL	DISP: Dead	HISTO: 860029

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Bone	Esophagus	Lung
Mammary Gland	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Thymus	Thyroid Gland	Trachea

MISSING

Epididymis	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic
Lymph Node - Mesenteric	Pancreas	Preputial Gland	Prostate
Seminal Vesicle	Spleen	Stomach - Forestomach	Stomach - Glandular
Testes	Urinary Bladder		

AUTO PRECLUDES DIAG.

Bone Marrow	Brain
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OBSERVATIONS

Adrenal Gland Note: [PHEOCHROM BGN] TGLs = 1-4	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Minimal
Lymph Node Note: [CONGESTION] TGLs = 2-9	Mandibular	Congestion	Moderate
Nose		Inflammation	Suppurative, Minimal

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 30

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860030

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
Mesentery	Fat	Necrosis	Coagulative, Moderate
	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 3-15,2-15			
Note: [NECROSIS] TGLs = 7-16			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 5-14			
Prostate		Inflammation	Suppurative, Mild
Skin	Subcut Tiss	Fibrosarcoma	
Note: [FIBROSARC] TGLs = 1-13			
Spleen		Pigmentation	Hemosiderin, Moderate
Note: [PIGMENT] TGLs = 4-2			
Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 31

TRT#: 1

SEX: Male

DAY ON TEST: 455

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860031

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Nose
Preputial Gland
Skin
Thymus

Bone
Esophagus
Intestine Small - Duodenum
Lung
Pancreas
Prostate
Spleen
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Trachea

MISSING

Mammary Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Testes	Interstit Cell	Adenoma	

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 32

TRT#: 1

SEX: Male

DAY ON TEST: 671

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860032

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Adrenal Gland Note: [PHEOCHROM BGN] TGLs = 6-4	Medulla	Pheochromocytoma Benign	
Brain Note: CEREBELLAR LESION IS VASCULAR IN ORIGIN.	Cerebellum	Developmental Malformation	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
Liver		Hyperplasia	Minimal
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
Preputial Gland Note: [INFLAMMATION] TGLs = 1-5		Inflammation	Chronic, Moderate
Spleen Note: [LEUKEMIA MONUC] TGLs = 5-2		Leukemia Mononuclear	
Testes Note: [ADENOMA] TGLs = 3-5,4-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
 Test Type: CHRONIC
 Route: GAVAGE
 Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
 Test Compound: Coumarin
 CAS Number: 91-64-5

Date Report Requested: 10/19/2014
 Time Report Requested: 03:39:32
 First Dose M/F: NA / NA
 Lab: AM BIO

ANIMAL ID: 33

TRT#: 1

SEX: Male

DAY ON TEST: 573

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860033

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Islets, Pancreatic	Mammary Gland	Nose
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Pheochromocytoma Benign	
Bone Marrow		Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-2			
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-3,4-12			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Pancreas		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-13			
Stomach	Forestomach	Ulcer	Marked
	Glandular	Ulcer	Moderate
Note: [ULCER] TGLs = 6-7			
Testes	Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 33

TRT#: 1

SEX: Male

DAY ON TEST: 573

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860033

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ADENOMA] TGLs = 1-5

Thymus

Leukemia Mononuclear

Note: [LEUKEMIA MONUC] TGLs = 5-4

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 34	TRT#: 1	SEX: Male	DAY ON TEST: 455
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860034

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver	Lung
Lymph Node - Mesenteric	Mammary Gland	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 - Mandibular

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Nose		Inflammation	Suppurative, Minimal
Testes	Interstit Cell	Adenoma	

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 35

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860035

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Prostate		Hyperplasia	Mild
Spleen		Developmental Malformation	
Note: [DEVELOP MALFOR] TGLs = 1-2			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 36

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860036

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Blood	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	Mammary Gland
Nose	Parathyroid Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland	Medulla	Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Note: [LEUKEMIA MONUC] TGLs = 5-2			
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Lung	Alveolar Epith	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [HYPERPLASIA] TGLs = 7-15			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 6-4			
Note: [LEUKEMIA MONUC] TGLs = 4-9			
Note: [LEUKEMIA MONUC] TGLs = 3-16			
Pancreas		Leukemia Mononuclear	
Pituitary Gland		Leukemia Mononuclear	
Preputial Gland		Adenoma	
Note: [ADENOMA] TGLs = 1-13			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-14			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 36	TRT#: 1	SEX: Male	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860036

ORGAN AND ACCOUNTABLE SITE STATUS

Testes	Interstit Cell	Adenoma
Note: [ADENOMA] TGLs = 8-5		
Thymus		Leukemia Mononuclear

PRIMARY CAUSE OF DEATH	-
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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 37	TRT#: 1	SEX: Male	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860037

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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 - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Parathyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Mild
Lung	Alveolar Epith	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 38

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860038

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Parathyroid Gland
Preputial Gland	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 3-13			
Pancreas	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-15			
Prostate		Inflammation	Suppurative, Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			
Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 39

TRT#: 1

SEX: Male

DAY ON TEST: 720

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860039

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
Epididymis	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Skin	Stomach - Glandular
Trachea	Urinary Bladder		

OBSERVATIONS

Bone Marrow		Hyperplasia	Mononuclear CI, Moderate
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
[Leukemia Mononuclear TGLS = 5-1]			
Liver		Hepatocellular Carcinoma	
	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 8-2]			
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 9-15			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-4			
Note: [LEUKEMIA MONUC] TGLs = 10-4			
Mammary Gland		Galactocele	Mild
Note: [GALACTOCELE] TGLs = 1-17			
Mesentery	Fat	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 13-4			
Nose		Inflammation	Suppurative, Minimal
Pancreas		Leukemia Mononuclear	
Seminal Vesicle		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 39	TRT#: 1	SEX: Male	DAY ON TEST: 720
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860039

ORGAN AND ACCOUNTABLE SITE STATUS

Spleen Note: [LEUKEMIA MONUC] TGLs = 2-14,3-14		Leukemia Mononuclear	
Stomach Note: [ULCER] TGLs = 11-16	Forestomach Forestomach	Leukemia Mononuclear Ulcer	Marked
Testes Note: [ADENOMA] TGLs = 6-5	Interstit Cell	Adenoma	
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 40

TRT#: 1

SEX: Male

DAY ON TEST: 728

DOSE: VEHICLE CONTROL

DISP: Dead

HISTO: 860040

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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 - Mandibular	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 Gland	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
Lung		Adenocarcinoma	Metastatic (Uncertain Primary Site)
		Fibrosarcoma	

Note: THERE ARE TWO DISTINCT TUMORS WHICH ARE METASTATIC
 Note: TO LUNG. ORIGIN IS UNKNOWN BUT PROBABLY ORIGINATES IN
 Note: CERVICAL AREA.

Note: [ADENOCARC] TGLs = 9-13,9-3

Note: [FIBROSARC] TGLs = 5-12,8-13

Mesentery	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 2-16			

Pituitary Gland	Pars Distalis	Adenoma	
Testes	Interstit Cell	Adenoma	

Note: [ADENOMA] TGLs = 3-5,4-5

Tissue NOS		Adenocarcinoma	
		Fibrosarcoma	

Note: [FIBROSARC] TGLs = 1-15

Note: [ADENOCARC] TGLs = 6-13,7-13

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 40

TRT#: 1

SEX: Male

DAY ON TEST: 728

DOSE: VEHICLE CONTROL

DISP: Dead

HISTO: 860040

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 41

TRT#: 1

SEX: Male

DAY ON TEST: 611

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860041

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Bone		Chordoma	
Kidney		Nephropathy	Mild
Liver		Developmental Malformation	
	Bile Duct	Hyperplasia	Minimal
Note: [DEVELOP MALFOR] TGLs = 5-2			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 3-16			
Nose		Fungus	Moderate
		Inflammation	Suppurative, Minimal
Note: FUNGUS IS ASPERGILLIS			
Parathyroid Gland		Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 8-9			
Preputial Gland	Duct	Dilatation	Marked
Note: [DILATATION] TGLs = 6-15			
Stomach	Forestomach	Ulcer	Mild
Note: [ULCER] TGLs = 10-6			
Testes	Interstitial Cell	Adenoma	
	Seminif Tub	Atrophy	Marked
Note: [ADENOMA] TGLs = 2-5			
Note: [ATROPHY] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 42

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860042

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
	Bile Duct	Hyperplasia	Minimal
Note: [HYPERPLASIA] TGLs = 2-2			
Pancreas		Adenoma	
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Thyroid Gland	Follicular Cel	Carcinoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 43

TRT#: 1

SEX: Male

DAY ON TEST: 453

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860043

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 2-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 44

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860044

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 5-1]			
Liver		Clear Cell Focus	
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
Note: [FATTY CHANGE] TGLs = 7-15,8-15			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 6-16			
Preputial Gland	Duct	Dilatation	Marked
		Inflammation	Suppurative, Moderate
Note: [DILATATION] TGLs = 4-18			
Skin		Inflammation	Chronic, Moderate
Spleen		Congestion	Moderate
Note: [CONGESTION] TGLs = 2-2			
Stomach	Forestomach	Hyperkeratosis	Mild
Note: [HYPERKERATOSIS] TGLs = 9-17			
Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 3-5]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 45	TRT#: 1	SEX: Male	DAY ON TEST: 455
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860045

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver
Lung	Lymph Node - Mandibular	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

OBSERVATIONS

Kidney		Nephropathy	Minimal
Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 46

TRT#: 1

SEX: Male

DAY ON TEST: 453

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860046

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Lung
Nose
Preputial Gland
Skin
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Thyroid Gland

Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Trachea

OBSERVATIONS

Bone
Heart
Kidney
Liver
Testes
Note: [ADENOMA] TGLs = 1-5

Bile Duct
Interstit Cell

Necrosis
Cardiomyopathy
Nephropathy
Hyperplasia
Adenoma

Moderate
Mild
Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 47

TRT#: 1

SEX: Male

DAY ON TEST: 408

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860047

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Seminal Vesicle
Thymus

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Preputial Gland
Spleen
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Prostate
Stomach - Forestomach
Trachea

OBSERVATIONS

Heart
Kidney
Liver
Mesentery
 Note: [INFLAMMATION] TGLs = 2-13
Skin
 Note: [INFLAMMATION] TGLs = 1-17
 Note: SUBQ SCROTAL AREA
Testes
 Note: [ADENOMA] TGLs = 5
 Note: [ATROPHY] TGLs = 5-5

Bile Duct
Fat

Interstitial Cell
Seminif Tub

Cardiomyopathy
Nephropathy
Hyperplasia
Inflammation

Hemorrhage
Inflammation

Adenoma
Atrophy

Mild
Minimal
Minimal
Chronic, Moderate

Moderate
Chronic, Marked

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 48	TRT#: 1	SEX: Male	DAY ON TEST: 335
	DOSE: VEHICLE CONTROL	DISP: Gavage Death	HISTO: 860048

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Parathyroid Gland

OBSERVATIONS

Heart	Cardiomyopathy	Mild
Kidney	Nephropathy	Minimal

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 49	TRT#: 1	SEX: Male	DAY ON TEST: 730
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860049

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal
Pancreas		Atrophy	Mild
Preputial Gland		Carcinoma	
Note: [CARCINOMA] TGLs = 2-14,1-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 50

TRT#: 1

SEX: Male

DAY ON TEST: 472

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860050

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lymph Node - Mandibular
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			

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Lung	Alveolar Epith	Hyperplasia	Moderate
Mesentery	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			
Prostate		Inflammation	Suppurative, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 51	TRT#: 1	SEX: Male	DAY ON TEST: 455
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860051

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Testes	Interstit Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 52 **TRT#:** 1 **SEX:** Male **DAY ON TEST:** 729
DOSE: VEHICLE CONTROL **DISP:** Terminal Sacrifice **HISTO:** 860052

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Parathyroid Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Note: [CARDIOMYOPATHY] TGLs = 4-3			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 2-13			
Pancreas	Acinus	Hyperplasia	Moderate
Preputial Gland		Hyperplasia	Moderate
		Inflammation	Suppurative, Moderate
Note: [HYPERPLASIA] TGLs = 1-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-14,3-5			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 53

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860053

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Mesentery	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Note: [ADENOMA] TGLs = 2-13			
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 54

TRT#: 1

SEX: Male

DAY ON TEST: 372

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860054

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney	Congestion	Mild
	Nephropathy	Minimal
Note: [CONGESTION] TGLs = 4-1		
Liver	Fatty Change	Minimal
Nose	Fungus	Moderate
	Inflammation	Suppurative, Moderate
Note: FUNGUS RESEMBLES ASPERGILLIS		

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 55	TRT#: 1	SEX: Male	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860055

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Preputial Gland		Inflammation	Suppurative, Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 56	TRT#: 1	SEX: Male	DAY ON TEST: 578
	DOSE: VEHICLE CONTROL	DISP: Dead	HISTO: 860056

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Heart	Lymph Node - Mandibular
Nose	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea

MISSING

Epididymis	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Ileum	Intestine Small - Jejunum	Lymph Node - Mesenteric	Mammary Gland
Parathyroid Gland	Preputial Gland	Prostate	Seminal Vesicle
Testes	Urinary Bladder		

AUTO PRECLUDES DIAG.

Intestine Small - Duodenum	Islets, Pancreatic	Pancreas	Thyroid Gland
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OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Mild
Lung	Alveolar Epith	Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 2-12			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 57

TRT#: 1

SEX: Male

DAY ON TEST: 601

DOSE: VEHICLE CONTROL

DISP: Dead

HISTO: 860057

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large - Rectum	Islets, Pancreatic	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Preputial Gland	Salivary Glands	Skin
Spleen	Testes	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon
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OBSERVATIONS

Intestine Small	Duodenum	Fibrosarcoma	Metastatic (Uncertain Primary Site)
	Ileum	Fibrosarcoma	Metastatic (Uncertain Primary Site)
	Jejunum	Fibrosarcoma	Metastatic (Uncertain Primary Site)
Kidney		Fibrosarcoma	Metastatic (Uncertain Primary Site)
Liver		Fibrosarcoma	Metastatic (Uncertain Primary Site)
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 3-2			
Lung		Inflammation	Suppurative, Moderate
Mesentery		Fibrosarcoma	Metastatic (Uncertain Primary Site)
	Fat	Hemorrhage	Marked
Note: [HEMORRHAGE] TGLs = 8-16			
Note: [FIBROSARC] TGLs = 7-17,12-19			
Nose		Inflammation	Suppurative, Mild
Pancreas		Fibrosarcoma	Metastatic (Uncertain Primary Site)
Parathyroid Gland		Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 1-9			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 9-4			
Prostate		Inflammation	Suppurative, Moderate
Seminal Vesicle		Fibrosarcoma	Metastatic (Uncertain Primary Site)

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 57	TRT#: 1	SEX: Male	DAY ON TEST: 601
	DOSE: VEHICLE CONTROL	DISP: Dead	HISTO: 860057

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [FIBROSARC] TGLs = 2-5			
Skeletal Muscle		Fibrosarcoma	Metastatic (Uncertain Primary Site)
Note: [FIBROSARC] TGLs = 4-14,5-14			
Stomach	Glandular	Fibrosarcoma	Metastatic (Uncertain Primary Site)
	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 6-15			
Note: [FIBROSARC] TGLs = 10-15			

PRIMARY CAUSE OF DEATH

-

Animal Note: EXTENSIVE FIBROSARCOMA IN MESENTERY WITH EXTENSION TO MOST

Animal Note: OF VISCERAL ORGANS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 58

TRT#: 1

SEX: Male

DAY ON TEST: 730

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860058

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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			

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Infiltration Cellular	Lymphocyte, Mild
		Mixed Cell Focus	
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 1-13			
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 59

TRT#: 1

SEX: Male

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860059

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lymph Node - Mandibular	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			

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
[Pheochromocytoma Benign TGLS = 3-4]			
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 4-1]			
Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Lung		Alveolar/Bronchiolar Adenoma	
Note: TGL 6&7 REPRESENT SAME ADENOMA			
Note: [ALV BRON ADEN] TGLs = 6,7-13			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 5-14			
Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 1-5,2-5]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 60

TRT#: 1

SEX: Male

DAY ON TEST: 622

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860060

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Liver	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Pancreas	Parathyroid Gland	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Epididymis		Mesothelioma Nos	
Note: [MESOTHELIO NOS] TGLs = 3-5			
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-14			
Nose		Fungus	Marked
		Inflammation	Suppurative, Moderate
Note: FUNGUS IS ASPERGILLIS			
Testes	Interstit Cell	Adenoma	
		Mesothelioma Nos	
Note: [ADENOMA] TGLs = 2-5			
Note: [MESOTHELIO NOS] TGLs = 3-5			
Tissue NOS		Mesothelioma Nos	
Note: [MESOTHELIO BGN] TGLs = 3-5			
Note: [MESOTHELIO NOS] TGLs = 3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 61

TRT#: 3

SEX: Male

DAY ON TEST: 482

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860121

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex

Adrenal Gland - Medulla

Bone

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 - Mandibular

Lymph Node - Mesenteric

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

Mammary Gland

OBSERVATIONS

Bone Marrow

Hyperplasia

Neutrophil, Moderate

Heart

Cardiomyopathy

Mild

Note: [CARDIOMYOPATHY] TGLs = 5-3

Kidney

Nephropathy

Minimal

Skin

Inflammation

Suppurative, Marked

Keratoacanthoma

Note: [KERATOACANTHOMA] TGLs = 1-13

Note: [INFLAMMATION] TGLs = 2-14

Testes

Interstitial Cell

Adenoma

Note: [ADENOMA] TGLs = 4-5

Zymbal's Gland

Carcinoma

Note: MASS IN ZYMBALS & SKIN OF FACE MAYBE SAME TUMOR

Note: [CARCINOMA] TGLs = 3-15

Note: BUT RESEMBLE KERATOACANTHOMA.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 62

TRT#: 3

SEX: Male

DAY ON TEST: 673

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860122

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Salivary Glands
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Lung
Parathyroid Gland
Skin
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Prostate
Spleen
Thyroid Gland

OBSERVATIONS

Heart
Kidney
Liver
Mesentery
 Note: [NECROSIS] TGLs = 2-13
Nose
Pancreas
Pharynx
 Note: [PAPILLOMA SQUA] TGLs = 3-14
Pituitary Gland
Preputial Gland
Testes
 Note: [ADENOMA] TGLs = 1-5

Bile Duct
Fat

Pars Distalis

Interstit Cell

Cardiomyopathy
Nephropathy
Hyperplasia
Necrosis

Inflammation
Atrophy
Squamous Cell Papilloma

Cyst
Inflammation
Adenoma

Mild
Moderate
Mild
Coagulative, Moderate

Suppurative, Moderate
Mild

Suppurative, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 63

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860123

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mesenteric	Mammary Gland
Nose	Pancreas	Parathyroid Gland	Pituitary Gland
Preputial Gland	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Gland Note: [CYTOPLAS ALTER] TGLs = 2-4	Cortex	Cytoplasmic Alteration	Mild
Heart		Cardiomyopathy	Mild
Kidney [Nephropathy TGLS = 3-1]		Nephropathy	Moderate
Liver		Basophilic Focus	
Lymph Node Note: [HYPERPLASIA] TGLs = 1-9	Bile Duct Mandibular	Hyperplasia Hyperplasia	Minimal Lymphoid, Moderate
Prostate		Inflammation	Suppurative, Mild
Stomach Note: [HYPERKERATOSIS] TGLs = 5-6	Forestomach	Hyperkeratosis	Mild
Testes Note: [ADENOMA] TGLs = 4-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 64

TRT#: 3
DOSE: 25 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 453
HISTO: 860124

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Mesentery	Fat	Inflammation	Suppurative, Mild
	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 1-13			
Note: [INFLAMMATION] TGLs = 1-13			
Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 2-5,3-5]			

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 65	TRT#: 3	SEX: Male	DAY ON TEST: 639
	DOSE: 25 MG/KG	DISP: Moribund	HISTO: 860125

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Parathyroid Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Gland	Medulla	Basophilic Focus	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 2-1]			
Liver		Necrosis	Coagulative, Mild
[Necrosis TGLS = 4-2]			
Nose		Inflammation	Suppurative, Minimal
Pituitary Gland	Pars Distalis	Cyst	
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 5-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 66	TRT#: 3	SEX: Male	DAY ON TEST: 729
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860126

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular	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

Ear		Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 1-14			
Heart		Cardiomyopathy	Moderate
Islets, Pancreatic		Adenoma	
Note: [ADENOMA] TGLs = 4-13			
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
Pituitary Gland	Pars Distalis	Adenoma	
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 67

TRT#: 3

SEX: Male

DAY ON TEST: 645

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860127

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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
Lung	Lymph Node - Mandibular	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 Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 2-1]			
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Lymph Node	Mediastinal	Hemorrhage	Mild
	Renal	Hemorrhage	Mild
	Mesenteric	Infiltration Cellular	Histiocyte, Mild
Note: [HEMORRHAGE] TGLs = 6-13			
Note: [HEMORRHAGE] TGLs = 3-14			
Note: [INFILTRAT CELL] TGLs = 8-4			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-2			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 68	TRT#: 3	SEX: Male	DAY ON TEST: 622
	DOSE: 25 MG/KG	DISP: Moribund	HISTO: 860128

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Mild
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Preputial Gland		Inflammation	Suppurative, Mild
Stomach	Glandular	Inflammation	Chronic, Mild
	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 4,5-6			
Note: [INFLAMMATION] TGLs = 6-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1,2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 69

TRT#: 3

SEX: Male

DAY ON TEST: 453

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860129

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Bile Duct

Hyperplasia

Mild

Testes

Interstit Cell

Adenoma

[Adenoma TGLS = 1-5,2-5]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 70

TRT#: 3

SEX: Male

DAY ON TEST: 577

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860130

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Testes	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 4-1			
Liver		Fatty Change	Minimal
		Inflammation	Suppurative, Moderate
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Stomach	Forestomach	Inflammation	Chronic, Marked
	Forestomach	Ulcer	Marked
Note: [INFLAMMATION] TGLs = 5-13			
Note: [ULCER] TGLs = 5-13,2-13			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 71

TRT#: 3

SEX: Male

DAY ON TEST: 611

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860131

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Salivary Glands	Seminal Vesicle
Skin	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
		Necrosis	Coagulative, Mild
Note: [HYPERPLASIA] TGLs = 4-2			
Lung		Leukemia Mononuclear	
Nose		Inflammation	Suppurative, Marked
Parathyroid Gland		Hyperplasia	Mild
Prostate		Inflammation	Suppurative, Moderate
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-2			
Stomach	Forestomach	Ulcer	Mild
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 6-13			
Note: [ULCER] TGLs = 5-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 72

TRT#: 3

SEX: Male

DAY ON TEST: 613

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860132

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Brain	Epididymis	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Jejunum	Islets, Pancreatic	Lymph Node - Mesenteric	Mammary Gland
Nose	Pancreas	Parathyroid Gland	Prostate
Salivary Glands	Skin	Testes	Thyroid Gland
Trachea			

AUTO PRECLUDES DIAG.

Intestine Small - Ileum

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Ear		Fibroma	
Note: [FIBROMA] TGLs = 1-15			
Heart		Leukemia Mononuclear	
Kidney		Nephropathy	Moderate
Liver		Hyperplasia	Moderate
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-2			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
Pituitary Gland		Leukemia Mononuclear	
Preputial Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 2-14			
Seminal Vesicle		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-13			
Stomach	Glandular	Mineralization	Mild
	Forestomach	Ulcer	Moderate
Note: [MINERALIZATION] TGLs = 6-6			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 72

TRT#: 3

SEX: Male

DAY ON TEST: 613

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860132

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ULCER] TGLs = 5-6

Thymus

Leukemia Mononuclear

Urinary Bladder

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 73

TRT#: 3

SEX: Male

DAY ON TEST: 625

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860133

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Prostate
Spleen
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Nose
Salivary Glands
Stomach - Glandular

Bone
Esophagus
Intestine Small - Duodenum
Lung
Pancreas
Seminal Vesicle
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Preputial Gland
Skin
Trachea

MISSING

Thymus

OBSERVATIONS

Heart
Kidney
 Note: [NEPHROPATHY] TGLs = 3-1
Liver

Mammary Gland
 Note: [FIBROADENOMA] TGLs = 1-13
Parathyroid Gland
Pituitary Gland
Stomach

 Note: [ULCER] TGLs = 6-6
Testes
 Note: [ADENOMA] TGLs = 2-5

Bile Duct

Pars Distalis
Forestomach
Forestomach

Interstit Cell

Cardiomyopathy
Nephropathy

Fatty Change
Hyperplasia
Necrosis
Fibroadenoma

Hyperplasia
Adenoma
Inflammation
Ulcer

Adenoma

Moderate
Moderate

Minimal
Mild
Coagulative, Minimal

Moderate

Chronic, Moderate
Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 74	TRT#: 3	SEX: Male	DAY ON TEST: 729
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860134

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular	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

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 3-1]			
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 1-13			
Prostate		Inflammation	Suppurative, Moderate
Testes	Interstit Cell	Adenoma	
Note: SCROTAL MASS IS NORMAL ADIPOSE TISSUE.			
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 75 TRT#: 3 SEX: Male DAY ON TEST: 593
DOSE: 25 MG/KG DISP: Dead HISTO: 860135

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Intestine Small - Duodenum	Islets, Pancreatic
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Preputial Gland	Prostate	Seminal Vesicle	Skin
Spleen			

MISSING

Esophagus	Heart	Lung	Lymph Node - Mandibular
Parathyroid Gland	Salivary Glands	Thymus	Thyroid Gland
Trachea			

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Ileum
Intestine Small - Jejunum	Testes	Urinary Bladder	

OBSERVATIONS

Kidney Note: [NEPHROPATHY] TGLs = 3-1		Nephropathy	Marked
Liver	Bile Duct	Hyperplasia Hyperplasia Necrosis	Minimal Moderate Coagulative, Moderate
Pituitary Gland Note: [ADENOMA] TGLs = 4-4	Pars Distalis	Adenoma	
Stomach Note: [ULCER] TGLs = 6-12 Note: [ULCER] TGLs = 5-14 [Ulcer TGLS = 1-14]	Forestomach Forestomach Glandular	Hyperkeratosis Ulcer Ulcer	Moderate Moderate Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 76

TRT#: 3

SEX: Male

DAY ON TEST: 625

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860136

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Periductular	Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 1-13			
Nose		Inflammation	Suppurative, Mild
Pancreas		Atrophy	Mild
Parathyroid Gland		Hyperplasia	Mild
Skin	Sebaceous GI	Adenoma	
		Inflammation	Chronic, Marked
Note: [INFLAMMATION] TGLs = 7-15			
Note: [ADENOMA] TGLs = 6-14			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 77

TRT#: 3

SEX: Male

DAY ON TEST: 652

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860137

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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 - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney	Renal Tubule	Adenoma	
	Renal Tubule	Hyperplasia	Marked
		Nephropathy	Moderate
[Nephropathy TGLS = 5-1]			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
Lung		Alveolar/Bronchiolar Adenoma	
Note: [ALV BRON ADEN] TGLs = 10-13,11-13			
Mesentery	Fat	Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 6-14			
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 2-9			
Preputial Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 1-5			
Stomach	Forestomach	Ulcer	Marked
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 9-14			
Note: [ULCER] TGLs = 7-14,8-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5,4-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 77

TRT#: 3

SEX: Male

DAY ON TEST: 652

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860137

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 78

TRT#: 3

SEX: Male

DAY ON TEST: 661

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860138

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	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	Pituitary Gland
-------------------------	-----------------

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Note: [NEPHROPATHY] TGLs = 3-1			
Liver	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 2-14			
Nose		Inflammation	Suppurative, Minimal
Preputial Gland		Inflammation	Suppurative, Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 4-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 79

TRT#: 3

SEX: Male

DAY ON TEST: 675

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860139

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Nose	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Intestine Small	Duodenum	Ulcer	Mild
Note: [ULCER] TGLs = 4-14			
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 6-1]			
Liver	Bile Duct	Hyperplasia	Minimal
Lung	Alveolar Epith	Alveolar/Bronchiolar Adenoma	
Note: [HYPERPLASIA] TGLs = 1-12		Hyperplasia	Mild
Pancreas		Atrophy	Marked
Salivary Glands		Inflammation	Suppurative, Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-15			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 7-5			
Thyroid Gland	Follicular Cel	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 80

TRT#: 3

SEX: Male

DAY ON TEST: 456

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860140

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Hepatocyte

Degeneration

Granular, Minimal

Fatty Change

Mild

Bile Duct

Hyperplasia

Minimal

Testes

Interstit Cell

Adenoma

[Adenoma TGLS = 1-5]

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 81	TRT#: 3	SEX: Male	DAY ON TEST: 671
	DOSE: 25 MG/KG	DISP: Moribund	HISTO: 860141

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Gland	Medulla	Hyperplasia	Moderate
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
Pancreas		Atrophy	Minimal
Preputial Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-14			
Skin		Squamous Cell Papilloma	
Note: [PAPILOMA SQUA] TGLs = 4-15			
Spleen		Hyperplasia	Lymphoid, Moderate
Note: [HYPERPLASIA] TGLs = 3-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 82

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860142

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Mammary Gland
Preputial Gland
Spleen
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Nose
Salivary Glands
Stomach - Forestomach

Bone
Esophagus
Intestine Small - Duodenum
Lymph Node - Mandibular
Parathyroid Gland
Seminal Vesicle
Stomach - Glandular

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mesenteric
Pituitary Gland
Skin
Trachea

OBSERVATIONS

Heart
Kidney
Liver
Lung
Pancreas
 Note: [INFLAMMATION] TGLs = 2-13
Prostate
Testes
 Note: [ADENOMA] TGLs = 1-5
Thymus
Thyroid Gland

Bile Duct

Interstit Cell

C Cell

Cardiomyopathy
Nephropathy
Hyperplasia
Hyperplasia
Inflammation

Hyperplasia
Adenoma

Inflammation
Hyperplasia

Mild
Moderate
Mild
Macrophage, Minimal
Chronic, Moderate

Mild

Suppurative, Mild
Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 83	TRT#: 3	SEX: Male	DAY ON TEST: 729
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860143

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 3-1			
Liver	Bile Duct	Hyperplasia	Mild
Pancreas		Atrophy	Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 84

TRT#: 3

SEX: Male

DAY ON TEST: 503

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860144

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Note: [PHEOCHROM BGN] TGLs = 8-4			
Bone Marrow		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-2			
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 9-3			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: MEDIASTINAL LYMPH NODE COULD NOT BE IDENTIFIED ON MICRO.			
Note: [LEUKEMIA MONUC] TGLs = 3-4			
Note: [LEUKEMIA MONUC] TGLs = 6-14			
Nose		Fungus	Moderate
		Inflammation	Suppurative, Mild
Note: NASAL FUNGUS IS ASPERGILLUS.			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-13,2-13			
Testes	Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 84

TRT#: 3

SEX: Male

DAY ON TEST: 503

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860144

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ADENOMA] TGLs = 7-5
Thymus

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 85

TRT#: 3

SEX: Male

DAY ON TEST: 645

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860145

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Salivary Glands	Seminal Vesicle
Skin	Spleen	Thymus	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney	Cortex	Cyst	
		Nephropathy	Marked
[Cyst TGLS = 5-1]			
[Nephropathy TGLS = 4-1]			
Liver	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Inflammation	Chronic, Mild
Note: [INFLAMMATION] TGLs = 6-13			
Parathyroid Gland		Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 1-9			
Prostate		Inflammation	Suppurative, Mild
Stomach	Forestomach	Inflammation	Chronic, Moderate
	Glandular	Ulcer	Mild
Note: [INFLAMMATION] TGLs = 7-13			
Note: [ULCER] TGLs = 8-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5,3-5			
Thyroid Gland	Follicular Cel	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 86	TRT#: 3	SEX: Male	DAY ON TEST: 352
	DOSE: 25 MG/KG	DISP: Gavage Death	HISTO: 860146

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Pancreas	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Esophagus	Periesoph Tiss	Hemorrhage	Marked
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Larynx		Hemorrhage	Marked
Note: [HEMORRHAGE] TGLs = 4-12			
Liver		Fatty Change	Minimal
Note: [FATTY CHANGE] TGLs = 7-2			
Lung		Hemorrhage	Mild
Nose		Hemorrhage	Mild
Skin		Hemorrhage	Minimal
Note: [HEMORRHAGE] TGLs = 1-8			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 87

TRT#: 3

SEX: Male

DAY ON TEST: 455

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860147

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Hepatocyte

Degeneration

Granular, Minimal

Bile Duct

Fatty Change

Moderate

Hyperplasia

Mild

Note: [FATTY CHANGE] TGLs = 1-2

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 88	TRT#: 3	SEX: Male	DAY ON TEST: 694
	DOSE: 25 MG/KG	DISP: Moribund	HISTO: 860148

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney	Renal Tubule	Hyperplasia	Mild
		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver		Eosinophilic Focus	
	Bile Duct	Hyperplasia	Mild
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Glandular	Inflammation	Chronic, Moderate
	Forestomach	Ulcer	Marked
Note: [INFLAMMATION] TGLs = 6-14			
Note: [ULCER] TGLs = 1-14,5-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 89	TRT#: 3	SEX: Male	DAY ON TEST: 343
	DOSE: 25 MG/KG	DISP: Moribund	HISTO: 860149

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Preputial Gland		Inflammation	Chronic, Marked
Note: [INFLAMMATION] TGLs = 1-12			
Skin		Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 2-12			
Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 90

TRT#: 3

SEX: Male

DAY ON TEST: 455

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860150

OBSERVATIONS

Kidney

Nephropathy

Mild

Liver

Hepatocyte

Degeneration

Granular, Minimal

Testes

Interstit Cell

Fatty Change

Mild

Adenoma

[Adenoma TGLS = 1-5]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 91

TRT#: 3

SEX: Male

DAY ON TEST: 600

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860151

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Epididymis
Islets, Pancreatic
Mammary Gland
Prostate
Stomach - Forestomach
Urinary Bladder

Bone
Esophagus
Lung
Nose
Salivary Glands
Thymus

Bone Marrow
Intestine Large - Colon
Lymph Node - Mandibular
Parathyroid Gland
Seminal Vesicle
Thyroid Gland

Brain
Intestine Large - Rectum
Lymph Node - Mesenteric
Preputial Gland
Skin
Trachea

AUTO PRECLUDES DIAG.

Intestine Large - Cecum
Pancreas

Intestine Small - Duodenum
Pituitary Gland

Intestine Small - Ileum
Stomach - Glandular

Intestine Small - Jejunum

OBSERVATIONS

Adrenal Gland
Heart
Kidney
Liver
Mesentery
Note: [NECROSIS] TGLs = 6,7-14
Spleen
Note: [LEUKEMIA MONUC] TGLs = 8-13
Note: [HEMORRHAGE] TGLs = 9-13
Testes
Note: [ADENOMA] TGLs = 4,5-5

Medulla
Bile Duct
Fat
Interstit Cell

Pheochromocytoma Benign
Cardiomyopathy
Nephropathy
Hyperplasia
Necrosis
Hemorrhage
Leukemia Mononuclear
Adenoma

Moderate
Mild
Mild
Coagulative, Moderate
Marked

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 92	TRT#: 3 DOSE: 25 MG/KG	SEX: Male DISP: Interval Sacrifice	DAY ON TEST: 455 HISTO: 860152
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OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration Fatty Change	Granular, Minimal Minimal
Testes	Bile Duct Interstit Cell	Hyperplasia Adenoma	Mild

[Adenoma TGLS = 2-5,1-5]

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 93

TRT#: 3

SEX: Male

DAY ON TEST: 453

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860153

OBSERVATIONS

Kidney

Nephropathy

Mild

Liver

Fatty Change

Minimal

Bile Duct

Hyperplasia

Minimal

Testes

Interstit Cell

Adenoma

[Adenoma TGLS = 1-5]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 94 **TRT#:** 3 **SEX:** Male **DAY ON TEST:** 636
DOSE: 25 MG/KG **DISP:** Moribund **HISTO:** 860154

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney Note: [NEPHROPATHY] TGLs = 2-1		Nephropathy	Marked
Liver Note: [INFLAMMATION] TGLs = 6-13	Bile Duct	Hyperplasia Inflammation Necrosis	Minimal Suppurative, Marked Coagulative, Minimal
Lung Mesentery Note: [INFLAMMATION] TGLs = 6-13	Fat	Inflammation Inflammation	Suppurative, Mild Suppurative, Marked
Nose Parathyroid Gland Note: [HYPERPLASIA] TGLs = 3-9		Inflammation Hyperplasia	Suppurative, Minimal Mild
Pituitary Gland Note: [ADENOMA] TGLs = 3-4	Pars Distalis	Adenoma	
Spleen Note: [INFLAMMATION] TGLs = 7-13		Inflammation	Suppurative, Marked
Stomach Note: [ULCER] TGLs = 4-13	Forestomach Forestomach	Inflammation Ulcer	Suppurative, Marked Marked
Testes Note: [ADENOMA] TGLs = 1-5	Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 94

TRT#: 3

SEX: Male

DAY ON TEST: 636

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860154

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

Animal Note: MASSIVE PERITONITIS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 95

TRT#: 3

SEX: Male

DAY ON TEST: 719

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860155

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex

Adrenal Gland - Medulla

Ear

Epididymis

Esophagus

Intestine Large - Cecum

Intestine Large - Colon

Intestine Large - Rectum

Intestine Small - Duodenum

Intestine Small - Jejunum

Islets, Pancreatic

Mammary Gland

Preputial Gland

Prostate

Salivary Glands

Seminal Vesicle

Trachea

Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Bone

Leukemia Mononuclear

Bone Marrow

Leukemia Mononuclear

Brain

Leukemia Mononuclear

Heart

Leukemia Mononuclear

Intestine Small

Ileum

Leukemia Mononuclear

Kidney

Leukemia Mononuclear

Note: [LEUKEMIA MONUC] TGLs = 6-1

Liver

Bile Duct

Hyperplasia

Mild

Leukemia Mononuclear

Lung

Leukemia Mononuclear

Lymph Node

Lumbar

Leukemia Mononuclear

Mandibular

Leukemia Mononuclear

Mediastinal

Leukemia Mononuclear

Mesenteric

Leukemia Mononuclear

Pancreatic

Leukemia Mononuclear

Note: [LEUKEMIA MONUC] TGLs = 2-9

Note: [LEUKEMIA MONUC] TGLs = 8-9

Note: [LEUKEMIA MONUC] TGLs = 9-16

Note: [LEUKEMIA MONUC] TGLs = 11-4

[Leukemia Mononuclear TGLS = 3-4]

Mesentery

Fat

Leukemia Mononuclear

Note: [LEUKEMIA MONUC] TGLs = 10-17

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 95	TRT#: 3 DOSE: 25 MG/KG	SEX: Male DISP: Moribund	DAY ON TEST: 719 HISTO: 860155
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ORGAN AND ACCOUNTABLE SITE STATUS

Nose		Inflammation	Suppurative, Minimal
Pancreas		Leukemia Mononuclear	
Pituitary Gland		Leukemia Mononuclear	
Skin		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 7-14			
Stomach	Glandular	Leukemia Mononuclear	
	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 12-15			
Note: [LEUKEMIA MONUC] TGLs = 13-15			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5,5-5			
Thymus		Leukemia Mononuclear	
Thyroid Gland	Follicular Cel	Carcinoma	
		Leukemia Mononuclear	
Note: [CARCINOMA] TGLs = 1-9			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 96

TRT#: 3

SEX: Male

DAY ON TEST: 680

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860156

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Gland	Medulla	Hyperplasia	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver	Bile Duct	Hyperplasia	Minimal
Note: [NECROSIS] TGLs = 1-2		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Spleen		Infarct	Moderate
Note: [INFARCT] TGLs = 3-2			
Stomach	Glandular	Mineralization	Mild
	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 5-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 97	TRT#: 3 DOSE: 25 MG/KG	SEX: Male DISP: Moribund	DAY ON TEST: 675 HISTO: 860157
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Gland	Medulla	Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 1-1			
Liver	Bile Duct	Hyperplasia	Mild
Nose		Inflammation	Suppurative, Minimal
Pancreas	Acinus	Hyperplasia	Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-13,5-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 98

TRT#: 3

SEX: Male

DAY ON TEST: 657

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860158

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mesenteric
Mammary Gland	Nose	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Intestine Large	Colon	Inflammation	Suppurative, Marked
Kidney		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Moderate
Lymph Node	Mediastinal	Hemorrhage	Mild
	Mandibular	Hyperplasia	Plasma Cell, Mild
Note: [HEMORRHAGE] TGLs = 3-4			
Note: [HYPERPLASIA] TGLs = 1-9			
Pancreas	Vein	Dilatation	Moderate
Note: [DILATATION] TGLs = 7-9			
Parathyroid Gland		Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Cyst	
Spleen		Congestion	Moderate
		Hyperplasia	Histiocytic, Moderate
Note: [HYPERPLASIA] TGLs = 6-2			
Note: [CONGESTION] TGLs = 5-2			
Stomach	Glandular	Inflammation	Suppurative, Mild
	Forestomach	Ulcer	Moderate
Note: [INFLAMMATION] TGLs = 11-14			
Note: [ULCER] TGLs = 10-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 98

TRT#: 3

SEX: Male

DAY ON TEST: 657

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860158

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 99

TRT#: 3

SEX: Male

DAY ON TEST: 666

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860159

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Cyst	Moderate
Note: [CYST] TGLs = 3-4			
Preputial Gland		Adenoma	
Note: [ADENOMA] TGLs = 1-14			
Note: [ADENOMA] TGLs = 2-13			
Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 100

TRT#: 3

SEX: Male

DAY ON TEST: 492

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860160

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lymph Node - Mandibular
Lymph Node - Mesenteric	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

Mammary Gland

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal
		Infiltration Cellular	Lymphocyte, Mild
Lung		Mineralization	Minimal
Spinal Cord			
Note: SECTIONS OF SP CORD & PERIPHERAL (SCIATIC NERVE) NORMAL.			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: [ADENOMA] TGLs = 1-5			
Note: [HYPERPLASIA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 101

TRT#: 3

SEX: Male

DAY ON TEST: 615

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860161

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Blood Vessel	Mesent Artery	Arteriosclerosis	Marked
Note: [ARTERIOSCLER] TGLs = 8-14,8-9			
Kidney	Cortex	Cyst	Moderate
		Nephropathy	Marked
Note: [CYST] TGLs = 4-13			
[Nephropathy TGLS = 3-1]			
Liver	Bile Duct	Fibrosis	Mild
		Hyperplasia	Minimal
		Inflammation	Chronic, Moderate
		Necrosis	Coagulative, Minimal
Note: [INFLAMMATION] TGLs = 6-2			
Nose		Fungus	Moderate
		Inflammation	Suppurative, Mild
		Metaplasia	Squamous, Moderate
Pancreas			
Note: PANCREATIC NODULE IS VASCULAR LESION.			
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 7-9			
Preputial Gland		Carcinoma	
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 9-6			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 101

TRT#: 3
DOSE: 25 MG/KG

SEX: Male
DISP: Moribund

DAY ON TEST: 615
HISTO: 860161

ORGAN AND ACCOUNTABLE SITE STATUS

Testes
Note: [ADENOMA] TGLs = 1-5,2-5

Interstit Cell

Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 102

TRT#: 3
DOSE: 25 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 453
HISTO: 860162

OBSERVATIONS

Kidney

Nephropathy

Mild

Liver

Hepatocyte

Degeneration

Granular, Mild

Fatty Change

Minimal

Bile Duct

Hyperplasia

Mild

Testes

Interstit Cell

Adenoma

[Adenoma TGLS = 1-5,2-5]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 103

TRT#: 3

SEX: Male

DAY ON TEST: 660

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860163

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Preputial Gland
Salivary Glands	Seminal Vesicle	Stomach - Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 5-1]			
Liver	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Inflammation	Suppurative, Marked
	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 3-15			
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Prostate		Inflammation	Suppurative, Mild
Skin		Cyst Epithelial Inclusion	Marked
Note: [CYST EPITH INC] TGLs = 2-14			
Spleen		Inflammation	Suppurative, Marked
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 6-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Thyroid Gland	Follicular Cel	Adenoma	
Note: THYROID ADENOMA IS CYSTIC.			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 104

TRT#: 3

SEX: Male

DAY ON TEST: 518

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860164

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
		Adenoma	
Pancreas			
Note: [ADENOMA] TGLs = 4-13			
Parathyroid Gland		Hyperplasia	Mild
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

Animal Note: BUN 206, CREATININE 3, CALCIUM 15.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 105

TRT#: 3

SEX: Male

DAY ON TEST: 90

DOSE: 25 MG/KG

DISP: Gavage Death

HISTO: 860165

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lung
Parathyroid Gland
Seminal Vesicle
Stomach - Glandular
Trachea

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Pituitary Gland
Skin
Testes
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Kidney
Nose
Prostate
Spleen
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Liver
Pancreas
Salivary Glands
Stomach - Forestomach
Thyroid Gland

MISSING

Lymph Node - Mandibular

Mammary Gland

Preputial Gland

OBSERVATIONS

Heart

Cardiomyopathy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 106

TRT#: 3

SEX: Male

DAY ON TEST: 692

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860166

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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

OBSERVATIONS

Kidney [Nephropathy TGLS = 4-1]		Nephropathy	Marked
Liver	Bile Duct	Fatty Change Hyperplasia Necrosis Adenoma	Minimal Minimal Coagulative, Minimal
Pituitary Gland [Adenoma TGLS = 2-4]	Pars Distalis		
Prostate		Inflammation	Suppurative, Mild
Stomach Note: [INFLAMMATION] TGLs = 3-13	Forestomach	Inflammation	Suppurative, Marked
Testes [Adenoma TGLS = 1-5]	Interstitial Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 107

TRT#: 3

SEX: Male

DAY ON TEST: 631

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860167

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Thymus	Trachea
Urinary Bladder			

OBSERVATIONS

Blood Vessel	Aorta	Mineralization	Moderate
Note: [MINERALIZATION] TGLs = 3-13			
Heart		Cardiomyopathy	Marked
Note: [CARDIOMYOPATHY] TGLs = 4-3			
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver	Bile Duct	Hyperplasia	Mild
Note: [INFLAMMATION] TGLs = 5-15			
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Hypertrophy	Mild
Stomach	Forestomach	Inflammation	Suppurative, Marked
	Glandular	Mineralization	Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Thyroid Gland	C Cell	Adenoma	
Note: [ADENOMA] TGLs = 6-9			

PRIMARY CAUSE OF DEATH

-

Animal Note: UREMIA A / SECONDARY MINERALIZATION

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 108

TRT#: 3

SEX: Male

DAY ON TEST: 569

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860168

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	Bone	Bone Marrow	Brain
Epididymis	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	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Mammary Gland

OBSERVATIONS

Adrenal Gland	Cortex	Hypertrophy	Mild
Esophagus		Inflammation	Suppurative, Marked
Note: ESOPHAGEAL LESION IS PROBABLY GAVAGE			
Note: ASSOCIATED & LEAD TO DEATH.			
Note: [INFLAMMATION] TGLs = 6-13,7-13			
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver	Bile Duct	Hyperplasia	Mild
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Moderate
Nose		Inflammation	Suppurative, Moderate
Pancreas		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Mild
Skin		Squamous Cell Papilloma	
Note: [PAPILOMA SQUA] TGLs = 1-8			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 109

TRT#: 3

SEX: Male

DAY ON TEST: 730

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860169

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pituitary Gland
Preputial Gland	Salivary Glands	Seminal Vesicle	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Nose		Inflammation	Suppurative, Minimal
Pancreas		Adenoma	
Parathyroid Gland		Hyperplasia	Moderate
Prostate		Hyperplasia	Mild
Skin		Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 4-14,5-14			
Spleen		Infarct	Marked
Note: [INFARCT] TGLs = 6-13			
Stomach	Forestomach	Hyperkeratosis	Moderate
	Forestomach	Squamous Cell Papilloma	
	Forestomach	Ulcer	Moderate
Note: [PAPILLOMA SQUA] TGLs = 7-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 110

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860170

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Developmental Malformation	
	Bile Duct	Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 8-2 [Hyperplasia TGLS = 7-2]			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 6-15			
Nose		Inflammation	Suppurative, Mild
Skin	Face	Squamous Cell Papilloma	
	Pinna	Squamous Cell Papilloma	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-14,3-14,4-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 5-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 111

TRT#: 3

SEX: Male

DAY ON TEST: 600

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860171

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Blood Vessel	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large - Rectum	Islets, Pancreatic
Lymph Node - Mesenteric	Mammary Gland	Nose	Parathyroid Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Stomach - Forestomach	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Stomach - Glandular		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Blood		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
Liver		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
Pancreas		Atrophy	Mild
Preputial Gland		Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 1-14			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 112

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860172

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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
Mammary Gland	Nose	Pancreas	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Skin
Stomach - Glandular	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Marked
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-2			
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 7-12			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 6-4			
Note: [LEUKEMIA MONUC] TGLs = 4-9			
Note: [LEUKEMIA MONUC] TGLs = 5-4			
Pituitary Gland	Pars Distalis	Adenoma	
Seminal Vesicle		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-2			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 8-13			
Testes	Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 112

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860172

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ADENOMA] TGLs = 2-5

Thymus

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 113

TRT#: 3

SEX: Male

DAY ON TEST: 698

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860173

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
Epididymis	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Islets, Pancreatic	Lung
Lymph Node - Mandibular	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Salivary Glands	Seminal Vesicle
Skin	Thymus	Trachea	Urinary Bladder

OBSERVATIONS

Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Thrombosis	
Note: [THROMBUS] TGLs = 9-14			
Intestine Small	Ileum	Leukemia Mononuclear	
	Jejunum	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 7-6			
Note: [LEUKEMIA MONUC] TGLs = 7-6			
Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-2			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 8-4			
Note: [LEUKEMIA MONUC] TGLs = 5-15			
Note: [LEUKEMIA MONUC] TGLs = 6-17			
Parathyroid Gland		Hyperplasia	Moderate
Prostate		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-13			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 113	TRT#: 3 DOSE: 25 MG/KG	SEX: Male DISP: Moribund	DAY ON TEST: 698 HISTO: 860173
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ORGAN AND ACCOUNTABLE SITE STATUS

Stomach	Forestomach	Leukemia Mononuclear	
	Glandular	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 10-16			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			
Thyroid Gland	C Cell	Hyperplasia	Mild
Tooth		Leukemia Mononuclear	
Urethra		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 114

TRT#: 3

SEX: Male

DAY ON TEST: 729

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860174

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	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	

OBSERVATIONS

Bone Note: [PROLIFERATION] TGLs = 2-10	Cranium	Proliferation	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Mild
	Bile Duct	Hyperplasia	Mild
Nose		Inflammation	Suppurative, Minimal
Pituitary Gland Note: [ADENOMA] TGLs = 3-4	Pars Distalis	Adenoma	
Testes Note: [ADENOMA] TGLs = 1-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 115

TRT#: 3

SEX: Male

DAY ON TEST: 456

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860175

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Hepatocyte

Degeneration

Granular, Mild

Testes

Bile Duct

Fatty Change

Mild

Interstit Cell

Hyperplasia

Mild

[Adenoma TGLS = 1-5]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 116

TRT#: 3

SEX: Male

DAY ON TEST: 671

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860176

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mesenteric	Mammary Gland
Nose	Pancreas	Preputial Gland	Salivary Glands
Seminal Vesicle	Spleen	Stomach - Forestomach	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Kidney	Cortex	Cyst	Moderate
		Nephropathy	Marked
Note: [CYST] TGLs = 4-13 [Nephropathy TGLS = 5-1]			
Liver	Bile Duct	Hyperplasia	Mild
Lymph Node	Lumbar	Hemorrhage	Mild
	Mandibular	Hyperplasia	Plasma Cell, Mild
Note: [HEMORRHAGE] TGLs = 6-14			
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 1-9			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 7-4			
Prostate		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 3-5			
Skin	Sebaceous GI	Inflammation	Chronic, Mild
Stomach	Glandular	Mineralization	Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 117

TRT#: 3

SEX: Male

DAY ON TEST: 663

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860177

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland	Medulla	Hyperplasia	Mild
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver	Bile Duct	Hyperplasia	Minimal
Lung		Squamous Cell Carcinoma	Metastatic (Uncertain Primary Site)
Note: SQ. CELL CARCINOMA IN BLOOD VESSEL.			
Nose		Inflammation	Suppurative, Minimal
Pancreas		Atrophy	Mild
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Ulcer	Marked
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Zymbal's Gland		Carcinoma	
Note: [CARCINOMA] TGLs = 3-13			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 118

TRT#: 3

SEX: Male

DAY ON TEST: 583

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860178

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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 - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Spleen
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Adenoma	
	Renal Tubule	Hyperplasia	Moderate
		Nephropathy	Marked
Note: TUMOR IS TUBULAR IN ORIGIN.			
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
Lung		Hyperplasia	Macrophage, Mild
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Mild
Skin		Inflammation	Chronic, Marked
Note: [INFLAMMATION] TGLs = 5-13			
Stomach	Forestomach	Ulcer	Marked
	Glandular	Ulcer	Marked
Note: [ULCER] TGLs = 4-14			
Note: [ULCER] TGLs = 3-6			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 119

TRT#: 3

SEX: Male

DAY ON TEST: 377

DOSE: 25 MG/KG

DISP: Gavage Death

HISTO: 860179

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Thyroid Gland

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Preputial Gland
Skin
Testes
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Thymus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 120

TRT#: 3
DOSE: 25 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 455
HISTO: 860180

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
Stomach	Forestomach	Squamous Cell Papilloma	
	[Squamous Cell Papilloma TGLS = 3-14]		
Testes	Interstitial Cell	Adenoma	
	[Adenoma TGLS = 1-5,2-5]		

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 121

TRT#: 5

SEX: Male

DAY ON TEST: 580

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860241

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Bone Marrow	Epididymis	Esophagus
Heart	Intestine Large - Rectum	Islets, Pancreatic	Mammary Gland
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Trachea	Urinary Bladder	

AUTO PRECLUDES DIAG.

Brain	Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
[Nephropathy TGLS = 6-1]			
Liver		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-2			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-9			
Nose		Inflammation	Suppurative, Moderate
Pancreas		Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 5-4			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-2			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 7-5			
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 121

TRT#: 5

SEX: Male

DAY ON TEST: 580

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860241

ORGAN AND ACCOUNTABLE SITE STATUS

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 122

TRT#: 5

SEX: Male

DAY ON TEST: 625

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860242

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Blood Vessel	Mesent Artery	Polyarteritis	Marked
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
Pancreas			
Note: PANCREATIC NODULE IS VASCULAR LESION.			
Parathyroid Gland		Hyperplasia	Mild
Stomach	Forestomach	Hyperkeratosis	Mild
	Glandular	Inflammation	Chronic, Mild
Note: [HYPERKERATOSIS] TGLs = 5-6			
Note: [INFLAMMATION] TGLs = 6-6			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 123

TRT#: 5

SEX: Male

DAY ON TEST: 473

DOSE: 50 MG/KG

DISP: Moribund Sacrifice

HISTO: 860243

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fatty Change	Moderate
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 1-13			
Nose		Inflammation	Suppurative, Mild
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 3-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5,5-5			

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 124

TRT#: 5

SEX: Male

DAY ON TEST: 596

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860244

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Pancreas	Parathyroid Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 6-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
		Galactocele	Moderate
Mammary Gland			
Note: [GALACTOCELE] TGLs = 1-16			
Mesentery	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 4-15,5-15,9-15			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 7-4			
Stomach	Forestomach	Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 8-14,10-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 125

TRT#: 5

SEX: Male

DAY ON TEST: 539

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860245

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Salivary Glands
Seminal Vesicle	Spleen	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Mammary Gland

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Minimal
Prostate		Inflammation	Suppurative, Mild
Skin	Subcut Tiss	Fibroma	
Note: [FIBROMA] TGLs = 1-8			
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 3-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 126	TRT#: 5	SEX: Male	DAY ON TEST: 546
	DOSE: 50 MG/KG	DISP: Dead	HISTO: 860246

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Heart	Intestine Small - Duodenum
Intestine Small - Jejunum	Islets, Pancreatic	Lung	Lymph Node - Mesenteric
Pancreas	Pituitary Gland	Preputial Gland	Prostate
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Trachea	Urinary Bladder	

MISSING

Epididymis	Intestine Large - Rectum	Lymph Node - Mandibular	Mammary Gland
Parathyroid Gland	Salivary Glands	Testes	Thyroid Gland

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Ileum
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OBSERVATIONS

Kidney Note: [NEPHROPATHY] TGLs = 2-1		Nephropathy	Marked
Liver		Cytologic Alterations	Minimal
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Minimal
Nose		Fungus	Marked
		Inflammation	Suppurative, Moderate
Note: FUNGUS IS ASPERGILLUS.			
Stomach Note: [ULCER] TGLs = 1-6	Forestomach	Ulcer	Marked

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 127

TRT#: 5

SEX: Male

DAY ON TEST: 631

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860247

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Pituitary Gland
Preputial Gland	Salivary Glands	Seminal Vesicle	Skin
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Marked
[Nephropathy TGLS = 4-1]			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 1-14,3-14			
Parathyroid Gland		Hyperplasia	Moderate
Pharynx		Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 6-15			
Prostate		Hyperplasia	Mild
Spleen		Pigmentation	Hemosiderin, Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 5-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 128

TRT#: 5

SEX: Male

DAY ON TEST: 622

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860248

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Small - Duodenum
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Ileum
Intestine Small - Jejunum	Stomach - Glandular		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 4-1]			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 3-15			
Pancreas		Adenoma	
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 1-9			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 5-14,6-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5		Mesothelioma Nos	

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 129	TRT#: 5	SEX: Male	DAY ON TEST: 428
	DOSE: 50 MG/KG	DISP: Gavage Death	HISTO: 860249

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Pancreas	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Mammary Gland

OBSERVATIONS

Eye	Cornea	Edema	Mild
Note: [EDEMA] TGLs = 1-12			
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Mild
Liver		Fatty Change	Minimal
Testes	Interstit Cell	Adenoma	
Thymus		Ectopic Tissue	
Note: ECTOPIC TISSUE RESEMBLES SALIVARY T.			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 130

TRT#: 5

SEX: Male

DAY ON TEST: 594

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860250

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Heart	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Jejunum	Islets, Pancreatic
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Epididymis	Intestine Small - Ileum	Testes
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AUTO PRECLUDES DIAG.

Intestine Large - Cecum

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Moderate
Nose		Inflammation	Suppurative, Minimal
Pancreas		Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Stomach	Forestomach	Hyperkeratosis	Mild
	Forestomach	Inflammation	Suppurative, Mild
Note: [HYPERKERATOSIS] TGLs = 4-6			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 131

TRT#: 5

SEX: Male

DAY ON TEST: 622

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860251

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Mesentery	Fat	Necrosis	Coagulative, Minimal
Note: [NECROSIS] TGLs = 2-13			
Nose		Fungus	Marked
Note: FUNGUS IS ASPERGILLUS.		Inflammation	Suppurative, Marked
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Ulcer	Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 132

TRT#: 5

SEX: Male

DAY ON TEST: 628

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860252

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney	Renal Tubule	Adenoma	
		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Cytologic Alterations	Moderate
		Fatty Change	Minimal
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Minimal
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 2-14			
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Stomach	Glandular	Mineralization	Mild
	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 5-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 133

TRT#: 5

SEX: Male

DAY ON TEST: 63

DOSE: 50 MG/KG

DISP: Gavage Death

HISTO: 860253

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Thymus

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Thyroid Gland

Bone
Esophagus
Intestine Small - Duodenum
Kidney
Mammary Gland
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Trachea

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Liver
Nose
Preputial Gland
Skin
Testes
Urinary Bladder

OBSERVATIONS

Heart
Lung

Cardiomyopathy
Edema

Mild
Minimal

Note: [EDEMA] TGLs = 1-3

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 134

TRT#: 5

SEX: Male

DAY ON TEST: 602

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860254

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Preputial Gland	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney	Renal Tubule	Adenoma Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver	Bile Duct	Fibrosis Hyperplasia Necrosis	Minimal Mild Coagulative, Minimal
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 1-9			
Pituitary Gland	Pars Distalis	Adenoma	
Prostate		Inflammation	Suppurative, Mild
Stomach	Forestomach Glandular	Hyperkeratosis Ulcer	Moderate Moderate
Note: [HYPERKERATOSIS] TGLs = 4-6			
Note: [ULCER] TGLs = 5-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 135

TRT#: 5

SEX: Male

DAY ON TEST: 588

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860255

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Islets, Pancreatic Note: ISLET CELL ADENOMA ON SLIDE #6.		Adenoma	
Kidney Note: [NEPHROPATHY] TGLs = 5-1		Nephropathy	Marked
Liver		Cytologic Alterations	Marked
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Mesentery Note: [NECROSIS] TGLs = 2-13,3-13	Fat	Necrosis	Coagulative, Mild
Parathyroid Gland Note: [HYPERPLASIA] TGLs = 1-9		Hyperplasia	Moderate
Stomach Note: [ULCER] TGLs = 6-6 Note: [ULCER] TGLs = 7-6	Forestomach Glandular	Ulcer Ulcer	Moderate Moderate
Testes Note: [ADENOMA] TGLs = 4-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 136

TRT#: 5

SEX: Male

DAY ON TEST: 455

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 25860256

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Mild
Lung		Alveolar/Bronchiolar Adenoma	
[Alveolar/Bronchiolar Adenoma TGLS = 2-13]			
Nose		Inflammation	Suppurative, Moderate
Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 1-4]			
Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 3-5]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 137

TRT#: 5

SEX: Male

DAY ON TEST: 666

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860257

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Mild
Prostate		Inflammation	Suppurative, Mild
Stomach	Forestomach	Ulcer	Marked
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 5-13			
Note: [ULCER] TGLs = 4-13,3-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 138

TRT#: 5

SEX: Male

DAY ON TEST: 678

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860258

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Tissue NOS
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Mild
Blood Vessel	Mesent Artery	Polyarteritis	Marked
	Mesent Artery	Thrombosis	Marked
Note: [THROMBUS] TGLs = 4-14			
Note: [POLYARTERITIS] TGLs = 4-14			
Heart		Cardiomyopathy	Moderate
Kidney	Cortex	Cyst	Moderate
		Nephropathy	Marked
[Cyst TGLS = 3-1]			
[Nephropathy TGLS = 2-1]			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Minimal
		Necrosis	Coagulative, Marked
Nose		Inflammation	Suppurative, Moderate
Pancreas		Fibrosis	Moderate
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 5-9			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 6-15			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 138

TRT#: 5

SEX: Male

DAY ON TEST: 678

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860258

ORGAN AND ACCOUNTABLE SITE STATUS

Tissue NOS

Note: TNOS IS BLOOD VESSEL.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 139

TRT#: 5

SEX: Male

DAY ON TEST: 575

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860259

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Intestine Large - Cecum	Mammary Gland
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OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 5-1			
Liver		Cytologic Alterations	Marked
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 2-9			
Nose		Inflammation	Suppurative, Minimal
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 140	TRT#: 5 DOSE: 50 MG/KG	SEX: Male DISP: Dead	DAY ON TEST: 429 HISTO: 860260
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Brain	Esophagus	Mammary Gland
Nose	Preputial Gland	Skin	Stomach - Forestomach
Stomach - Glandular			

AUTO PRECLUDES DIAG.

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone Marrow	Epididymis
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Spleen	Testes	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Note: MASSIVE AUTOLYTIC CHANGE.			
Kidney		Nephropathy	Minimal
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Marked

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 141 **TRT#:** 5 **SEX:** Male **DAY ON TEST:** 531
DOSE: 50 MG/KG **DISP:** Dead **HISTO:** 860261

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Small - Duodenum	Islets, Pancreatic	Lung	Pancreas
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Epididymis	Intestine Large - Rectum	Preputial Gland	Testes
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AUTO PRECLUDES DIAG.

Intestine Small - Ileum	Intestine Small - Jejunum
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 4-1			
Liver		Fatty Change	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Mild
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Moderate
	Mesenteric	Hyperplasia	Lymphoid, Moderate
Note: [HYPERPLASIA] TGLs = 2-9			
Mammary Gland		Galactocele	Moderate
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 1-6			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 142

TRT#: 5

SEX: Male

DAY ON TEST: 596

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860262

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Mesentery
Nose	Pancreas	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 6-14,5-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Mesentery			
Note: MESENTERIC LESION-NORMAL LYMPH NODE.			
Parathyroid Gland		Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 1-9			
Preputial Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 2-5			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 7-15,8-15			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 143

TRT#: 5

SEX: Male

DAY ON TEST: 569

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860263

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney Note: [NEPHROPATHY] TGLs = 6-1		Nephropathy	Marked
Liver		Cytologic Alterations	Minimal
		Fatty Change	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Mesentery Note: [NECROSIS] TGLs = 1-5	Fat	Necrosis	Coagulative, Mild
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Stomach Note: [ULCER] TGLs = 4-6	Forestomach	Ulcer	Moderate
Testes Note: [ADENOMA] TGLs = 2-5,3-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 144

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 455
HISTO: 860264

OBSERVATIONS

Eye
Note: [PIGMENT] TGLs = 1-13

Pigmentation

Mild

Kidney

Nephropathy

Mild

Liver

Hepatocyte

Degeneration

Granular, Minimal

Fatty Change

Minimal

Testes

Bile Duct

Hyperplasia

Mild

Interstit Cell

Adenoma

[Adenoma TGLS = 2-5]

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 145

TRT#: 5

SEX: Male

DAY ON TEST: 496

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860265

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
Lung		Inflammation	Suppurative, Mild
Nose		Fungus	Moderate
		Inflammation	Suppurative, Mild
Note: FUNGUS IS ASPERGILLUS.			
Parathyroid Gland		Hyperplasia	Mild
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 3-6			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 146

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 453
HISTO: 860266

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Moderate
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 1-13			
Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 2-5]			

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 147

TRT#: 5

SEX: Male

DAY ON TEST: 556

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860267

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

AUTO PRECLUDES DIAG.

Brain

OBSERVATIONS

Eye Note: [CATARACT] TGLs = 5-13		Cataract	Mild
Kidney Note: [NEPHROPATHY] TGLs = 3-1		Nephropathy	Marked
Liver	Bile Duct	Fibrosis Hyperplasia Necrosis	Mild Mild Coagulative, Mild
Stomach Note: [ULCER] TGLs = 4-6	Forestomach	Ulcer	Marked
Testes Note: [ADENOMA] TGLs = 2-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 148

TRT#: 5

SEX: Male

DAY ON TEST: 643

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860268

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon
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OBSERVATIONS

Heart		Inflammation	Suppurative, Moderate
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 4-1]			
Liver		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 5-2			
Pancreas			
Note: PANCREATIC NODULE IS NORMAL LYMPH NODE.			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 6-13,7-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH

-

Animal Note: EXTENSIVE AGINAL BACTERIAL COLONIZATION.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 149

TRT#: 5

SEX: Male

DAY ON TEST: 555

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860269

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Mammary Gland	Nose	Pancreas
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Lymph Node - Mesenteric

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 4-1			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Mild
		Hyperplasia	Mild
Parathyroid Gland			
Note: [HYPERPLASIA] TGLs = 1-9			
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland	Duct	Dilatation	Moderate
Note: [DILATATION] TGLs = 2-5			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 5-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 150

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 455
HISTO: 860270

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration Fatty Change	Granular, Minimal Mild
	Bile Duct	Hyperplasia	Mild
Mesentery	Fat	Necrosis	Coagulative, Moderate

Note: [NECROSIS] TGLs = 1-11

PRIMARY CAUSE OF DEATH

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 151

TRT#: 5

SEX: Male

DAY ON TEST: 622

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860271

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Epididymis
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Preputial Gland
Skin
Thymus

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Prostate
Spleen
Thyroid Gland

Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Salivary Glands
Stomach - Forestomach
Trachea

OBSERVATIONS

Bone
Note: "FEET" SHOULD BE TARSAL BONE.
Note: [INFLAMMATION] TGLs = 1-14

Inflammation
Chronic, Marked

Kidney
Liver
Pituitary Gland
Note: [ADENOMA] TGLs = 3-4
Testes
Note: [ADENOMA] TGLs = 2-5

Bile Duct
Pars Distalis
Interstitial Cell

Nephropathy
Hyperplasia
Necrosis
Adenoma
Adenoma
Moderate
Mild
Coagulative, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 152

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 453
HISTO: 860272

OBSERVATIONS

Kidney

Nephropathy

Mild

Liver

Hepatocyte

Degeneration

Granular, Mild

Testes

Bile Duct

Hyperplasia

Mild

Interstit Cell

Adenoma

Note: [ADENOMA] TGLs = 1-5,3-5

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 153

TRT#: 5

SEX: Male

DAY ON TEST: 408

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860273

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Mammary Gland

OBSERVATIONS

Kidney		Nephropathy	Mild
Lung		Atelectasis	Mild
Note: [ATELECTASIS] TGLs = 3-3			
Pharynx		Carcinoma	
Note: PHARYNX-CARCINOMA. PWG SHOULD REVIEW THIS ORAL MASS			
Note: [CARCINOMA] TGLs = 2-12			
Preputial Gland		Inflammation	Chronic, Mild
Skin		Degeneration	Mild
Note: [DEGEN] TGLs = 1-8			
Testes	Interstitial Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 154

TRT#: 5

SEX: Male

DAY ON TEST: 517

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860274

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Cecum
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

AUTO PRECLUDES DIAG.

Intestine Large - Colon	Intestine Large - Rectum
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OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Intestine Small		Adenocarcinoma	
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Marked
Parathyroid Gland		Hyperplasia	Mild
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 155

TRT#: 5

SEX: Male

DAY ON TEST: 601

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860275

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Salivary Glands	Seminal Vesicle
Skin	Spleen	Thymus	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Minimal
		Hyperplasia	Moderate
Parathyroid Gland			
Note: [HYPERPLASIA] TGLs = 1-9			
Prostate		Inflammation	Suppurative, Moderate
Stomach	Forestomach	Inflammation	Chronic, Mild
	Glandular	Mineralization	Mild
Note: [INFLAMMATION] TGLs = 4-6			
Note: [MINERALIZATION] TGLs = 5-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Trachea		Inflammation	Suppurative, Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 156 **TRT#:** 5 **SEX:** Male **DAY ON TEST:** 645
DOSE: 50 MG/KG **DISP:** Moribund **HISTO:** 860276

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Prostate	Salivary Glands
Seminal Vesicle	Spleen	Thymus	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 6-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 8-9			
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 2-13,3-13			
Skin		Inflammation	Suppurative, Mild
Note: [INFLAMMATION] TGLs = 4-13			
Stomach	Forestomach	Ulcer	Marked
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 9-6			
Note: [ULCER] TGLs = 7-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 5-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 156

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Moribund

DAY ON TEST: 645
HISTO: 860276

ORGAN AND ACCOUNTABLE SITE STATUS

Thyroid Gland	C Cell	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 157

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 455
HISTO: 860277

OBSERVATIONS

Kidney	Renal Tubule	Adenoma Nephropathy	Mild
Liver	Hepatocyte	Degeneration Fatty Change	Granular, Minimal Minimal
Mesentery	Bile Duct	Hyperplasia	Mild
Note: [NECROSIS] TGLs = 1-13	Fat	Necrosis	Coagulative, Moderate
Pituitary Gland [Adenoma TGLS = 3-4]	Pars Distalis	Adenoma	
Spleen Note: [FIBROSIS] TGLs = 4-2		Fibrosis	Mild
Testes [Adenoma TGLS = 2-5]	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 158

TRT#: 5

SEX: Male

DAY ON TEST: 694

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860278

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Mammary Gland
Prostate
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Pancreas
Salivary Glands
Thymus

Bone
Esophagus
Intestine Small - Duodenum
Lung
Pituitary Gland
Seminal Vesicle
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mesenteric
Preputial Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Heart
Kidney [Nephropathy TGLS = 3-1]
Liver
Lymph Node
Note: [HYPERPLASIA] TGLs = 1-9
Nose
Parathyroid Gland
Skin

Note: [INFLAMMATION] TGLs = 4-14
Note: [HYPERKERATOSIS] TGLs = 4-14
Note: [ACANTHOSIS] TGLs = 4-14
Spleen
Note: [HYPERPLASIA] TGLs = 2-13
Testes
Note: [ADENOMA] TGLs = 5-5

Bile Duct
Mandibular

Interstit Cell

Cardiomyopathy
Nephropathy

Hyperplasia
Hyperplasia

Inflammation
Hyperplasia
Acanthosis
Hyperkeratosis
Inflammation

Hyperplasia

Adenoma

Mild
Marked

Moderate
Lymphoid, Moderate

Suppurative, Mild
Mild
Moderate
Mild
Suppurative, Mild

Lymphoid, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 159

TRT#: 5

SEX: Male

DAY ON TEST: 545

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860279

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Eye		Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 2-8			
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Mild
		Inflammation	Suppurative, Mild
Nose		Adenoma	
Pituitary Gland	Pars Distalis	Ulcer	Moderate
Stomach	Forestomach		
Note: [ULCER] TGLs = 4-6,5-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 160

TRT#: 5

SEX: Male

DAY ON TEST: 506

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860280

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Nose	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Intestine Small	Duodenum	Ulcer	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Pancreas		Fibrosis	Mild
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 4-13			
Note: [ULCER] TGLs = 3-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 161

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 456
HISTO: 860281

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Mild
Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 2-5,1-5]			

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 162

TRT#: 5

SEX: Male

DAY ON TEST: 643

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860282

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lung	Lymph Node - Mesenteric	Mammary Gland
Pancreas	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Lymph Node - Mandibular

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Intestine Large	Colon	Adenoma	Papillary
Note: [ADENOMA] TGLs = 4-13			
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
Nose		Fungus	Marked
		Inflammation	Suppurative, Moderate
Note: FUNGUS IS ASPERGILLUS.			
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Glandular	Mineralization	Moderate
	Forestomach	Ulcer	Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 163

TRT#: 5

SEX: Male

DAY ON TEST: 525

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860283

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lymph Node - Mandibular
Lymph Node - Mesenteric	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Mammary Gland

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Mild
Lung	Alveolar Epith	Hyperplasia	Mild
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Mild
Skeletal Muscle		Inflammation	Chronic, Marked
Note: [INFLAMMATION] TGLs = 4-13			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 3-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 164

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 453
HISTO: 860284

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Moderate
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 1-5]			

PRIMARY CAUSE OF DEATH -

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 165

TRT#: 5

SEX: Male

DAY ON TEST: 615

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860285

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Spleen	Thymus	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Marked
[Nephropathy TGLS = 8-1]			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Marked
		Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 9-2			
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Moderate
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 6-13			
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 2-9			
Skin		Cyst Epithelial Inclusion	Marked
Note: [CYST EPITH INC] TGLs = 7-14			
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
[Ulcer TGLS = 10-6]			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 5-5			
Note: [ADENOMA] TGLs = 3-5			
[Adenoma TGLS = 4-5]			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 165

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Moribund

DAY ON TEST: 615
HISTO: 860285

ORGAN AND ACCOUNTABLE SITE STATUS

Thyroid Gland
Note: [ADENOMA] TGLs = 1-9

C Cell

Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 166

TRT#: 5

SEX: Male

DAY ON TEST: 548

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860286

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Islets, Pancreatic	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

INSUFFICIENT TISSUE

Intestine Large - Rectum

OBSERVATIONS

Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 5-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
Nose		Inflammation	Suppurative, Minimal
Pancreas		Adenoma	
Note: [ADENOMA] TGLs = 7-14			
Parathyroid Gland		Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 6-9			
Preputial Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-8			
Spleen		Inflammation	Suppurative, Moderate
Stomach	Forestomach	Hyperkeratosis	Marked
	Forestomach	Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 4-13			
Note: [HYPERKERATOSIS] TGLs = 4-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 166

TRT#: 5

SEX: Male

DAY ON TEST: 548

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860286

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 167

TRT#: 5

SEX: Male

DAY ON TEST: 506

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860287

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Pituitary Gland	Preputial Gland
Salivary Glands	Seminal Vesicle	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Intestine Small	Duodenum	Ulcer	Moderate
Note: [ULCER] TGLs = 7-6			
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1,4-1]			
Liver		Cytologic Alterations	Moderate
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Prostate		Inflammation	Suppurative, Marked
Skin		Cyst Epithelial Inclusion	Moderate
Note: [CYST EPITH INC] TGLs = 8-13			
Stomach	Glandular	Inflammation	Chronic, Mild
	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 9-14,5-14			
Note: [INFLAMMATION] TGLs = 6-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 168

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Interval Sacrifice

DAY ON TEST: 453
HISTO: 860288

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Moderate
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
Testes	Interstitial Cell	Adenoma	
	Seminif Tub	Atrophy	Marked

Note: [ATROPHY] TGLs = 1-5
[Adenoma TGLS = 2-5]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 169

TRT#: 5

SEX: Male

DAY ON TEST: 533

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860289

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Pancreas	Parathyroid Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Pituitary Gland	Thymus
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
[Hyperplasia TGLS = 3-2]			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-8			
Nose		Inflammation	Suppurative, Minimal
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Moderate
Note: [ULCER] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 6-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 170

TRT#: 5

SEX: Male

DAY ON TEST: 615

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860290

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Minimal
Pancreas		Adenoma	
Note: [ADENOMA] TGLs = 5-9			
Note: [ADENOMA] TGLs = 5-6			
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Inflammation	Chronic, Marked
Note: [INFLAMMATION] TGLs = 4-6			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1,2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 171

TRT#: 5

SEX: Male

DAY ON TEST: 679

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860291

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Islets, Pancreatic		Adenoma	
Note: [ADENOMA] TGLs = 5-13			
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Cytologic Alterations	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Note: [HYPERPLASIA] TGLs = 4-2			
Mesentery		Ectopic Tissue	
	Fat	Inflammation	Chronic, Moderate
	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 7-14			
Note: [INFLAMMATION] TGLs = 10-6			
Note: ECT IN PANCREAS IS NORMAL SPLENIC TISSUE.			
[Inflammation TGLS = 6-13]			
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Glandular	Mineralization	Mild
	Forestomach	Ulcer	Marked
[Ulcer TGLS = 8-6]			
Testes	Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 171

TRT#: 5

SEX: Male

DAY ON TEST: 679

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860291

ORGAN AND ACCOUNTABLE SITE STATUS

[Adenoma TGLS = 1-5,2-5]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:32
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 172

TRT#: 5

SEX: Male

DAY ON TEST: 657

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860292

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 5-1			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Lymph Node	Lumbar	Hemorrhage	Moderate
Note: [HEMORRHAGE] TGLs = 3-14			
Parathyroid Gland		Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 1-9			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 6-15,7-15			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:32

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 173

TRT#: 5

SEX: Male

DAY ON TEST: 531

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860293

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Preputial Gland	Prostate
Seminal Vesicle	Skin	Stomach - Glandular	Testes
Thymus	Thyroid Gland	Trachea	Urinary Bladder

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon
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OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Fatty Change	Mild
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Moderate
Lung		Inflammation	Suppurative, Marked
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 1-5			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Salivary Glands		Necrosis	Caseous, Marked
Spleen		Necrosis	Coagulative, Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-13			

PRIMARY CAUSE OF DEATH

-

Animal Note: SPLEEN, PANC. LN ADJACENT MESENTERY

Animal Note: PERITONITIS INVOLVES SURF. OF STOM, PANC, LIVER

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 174

TRT#: 5

SEX: Male

DAY ON TEST: 630

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860294

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 4-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 1-13			
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Inflammation	Chronic, Moderate
	Glandular	Inflammation	Chronic, Moderate
	Forestomach	Ulcer	Marked
Note: [INFLAMMATION] TGLs = 5-14			
Note: [ULCER] TGLs = 6-14			
Note: [INFLAMMATION] TGLs = 7-14			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5,3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 175

TRT#: 5

SEX: Male

DAY ON TEST: 498

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860295

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney	Cortex	Cyst	Mild
		Nephropathy	Marked
Note: [CYST] TGLs = 4-13 [Nephropathy TGLS = 3-1]			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 5-6			
Testes	Interstitial Cell	Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 1-5 Note: LEFT TESTE MISSING AT NECROPSY.			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 176

TRT#: 5

SEX: Male

DAY ON TEST: 512

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860296

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Mild
		Fatty Change	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Mild
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 3-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 5-5			
Thymus			
Note: THYMIC NODULE IS A NORMAL LYMPH NODE.			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 177

TRT#: 5

SEX: Male

DAY ON TEST: 729

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860297

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Ear		Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 1-14			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 5-1,6-1]			
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Skin		Fibroma	
		Squamous Cell Carcinoma	
Note: [FIBROMA] TGLs = 2-13			
Note: [SQUAM CEL CARC] TGLs = 7-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5,4-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 178

TRT#: 5

SEX: Male

DAY ON TEST: 580

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860298

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Heart	Intestine Small - Duodenum
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Nose
Pancreas	Parathyroid Gland	Pituitary Gland	Salivary Glands
Seminal Vesicle	Skin	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Epididymis	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Ileum	Intestine Small - Jejunum	Lymph Node - Mesenteric	Mammary Gland
Testes			

OBSERVATIONS

Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 1-1			
Liver	Bile Duct	Fibrosis	Mild
		Hyperplasia	Moderate
		Inflammation	Suppurative, Marked
		Necrosis	Coagulative, Moderate
Note: [INFLAMMATION] TGLs = 4-2			
Preputial Gland	Duct	Adenoma	
		Dilatation	Marked
Note: [ADENOMA] TGLs = 10-5			
Note: [DILATATION] TGLs = 10-5			
Prostate		Edema	Moderate
Spleen		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 6-2			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 7-6,8-6			
Zymbal's Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 2-9			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 178

TRT#: 5

SEX: Male

DAY ON TEST: 580

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860298

ORGAN AND ACCOUNTABLE SITE STATUS

Animal Note: PERITONITIS INVOLVES STOMACH, SPLEEN, AND LIVER.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 179

TRT#: 5

SEX: Male

DAY ON TEST: 730

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860299

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Thymus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
		Developmental Malformation	
	Bile Duct	Hyperplasia	Moderate
		Mixed Cell Focus	
		Necrosis	Coagulative, Mild
Note: [DEVELOP MALFOR] TGLs = 3-13			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 1-14			
Pituitary Gland	Pars Distalis	Adenoma	
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 180

TRT#: 5

SEX: Male

DAY ON TEST: 607

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860300

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Mesentery	Pituitary Gland	Preputial Gland
Salivary Glands	Seminal Vesicle	Skin	Spleen
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Gland Note: [PHEOCHROM BGN] TGLs = 10-4	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney Note: [NEPHROPATHY] TGLs = 2-1		Nephropathy	Marked
Liver		Cytologic Alterations	Minimal
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 3-2			
Nose		Inflammation	Suppurative, Moderate
Pancreas		Atrophy	Moderate
Parathyroid Gland Note: [HYPERPLASIA] TGLs = 9-9		Hyperplasia	Moderate
Prostate Note: [INFLAMMATION] TGLs = 5-5		Inflammation	Suppurative, Moderate
Skeletal Muscle Note: [INFLAMMATION] TGLs = 8-14		Inflammation	Suppurative, Marked
Stomach	Glandular	Mineralization	Moderate
	Forestomach	Ulcer	Marked
Note: [MINERALIZATION] TGLs = 6-6			
Note: [ULCER] TGLs = 7-13,4-13			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 180

TRT#: 5
DOSE: 50 MG/KG

SEX: Male
DISP: Moribund

DAY ON TEST: 607
HISTO: 860300

ORGAN AND ACCOUNTABLE SITE STATUS

Testes
Note: [ADENOMA] TGLs = 1-5

Interstit Cell

Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 181

TRT#: 7

SEX: Male

DAY ON TEST: 589

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860361

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Basophilic Focus	
		Cytologic Alterations	Marked
		Eosinophilic Focus	
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Prostate		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 3-5,3-13			
Stomach	Glandular	Mineralization	Moderate
	Forestomach	Ulcer	Marked
Note: [MINERALIZATION] TGLs = 5-6,6-6			
Note: [ULCER] TGLs = 4-14			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 182

TRT#: 7

SEX: Male

DAY ON TEST: 19

DOSE: 100MG/KG

DISP: Gavage Death

HISTO: 860362

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Mammary Gland

OBSERVATIONS

Kidney	Nephropathy	Minimal
Lung	Foreign Body	Minimal

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 183

TRT#: 7

SEX: Male

DAY ON TEST: 510

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860363

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Cytologic Alterations	Marked
		Developmental Malformation	
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Marked
Note: [DEVELOP MALFOR] TGLs = 2-2			
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Mild
Preputial Gland	Duct	Dilatation	Moderate
Note: [DILATATION] TGLs = 3-13			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 3-13			
Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 184

TRT#: 7

SEX: Male

DAY ON TEST: 563

DOSE: 100MG/KG

DISP: Dead

HISTO: 860364

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Small - Ileum
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fibrosis	Mild
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Mild
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 3-13			
Nose		Inflammation	Suppurative, Minimal
Prostate		Inflammation	Suppurative, Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 185 **TRT#:** 7 **SEX:** Male **DAY ON TEST:** 698
DOSE: 100MG/KG **DISP:** Moribund **HISTO:** 860365

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Intestine Small	Duodenum	Ulcer	Moderate
Note: [ULCER] TGLs = 5-13			
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver	Bile Duct	Fibrosis	Minimal
		Hyperplasia	Minimal
		Mineralization	Mild
		Necrosis	Coagulative, Mild
[Necrosis TGLS = 3-2]			
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 4-9			
Stomach	Forestomach	Inflammation	Suppurative, Moderate
	Glandular	Ulcer	Moderate
Note: [ULCER] TGLs = 7-13			
Note: [INFLAMMATION] TGLs = 6-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 186

TRT#: 7

SEX: Male

DAY ON TEST: 636

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860366

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Parathyroid Gland
Pituitary Gland	Preputial Gland	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Eye		Cataract	Moderate
	Retina	Degeneration	Moderate
Note: [CATARACT] TGLs = 1-13			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Moderate
Nose		Inflammation	Suppurative, Minimal
Prostate		Inflammation	Suppurative, Moderate
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 187

TRT#: 7

SEX: Male

DAY ON TEST: 453

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860367

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Hyperplasia	Minimal
Nose		Inflammation	Suppurative, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Stomach	Forestomach	Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 4-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 188

TRT#: 7

SEX: Male

DAY ON TEST: 426

DOSE: 100MG/KG

DISP: Gavage Death

HISTO: 860368

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Preputial Gland
Skin
Thymus

Bone
Esophagus
Intestine Small - Duodenum
Lung
Pancreas
Prostate
Spleen
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Trachea

OBSERVATIONS

Heart
Kidney
 Note: [NEPHROPATHY] TGLs = 3-1
Liver
 Note: [HYPERPLASIA] TGLs = 5-2
Nose
Testes
 Note: [ADENOMA] TGLs = 2-4
 Note: [ADENOMA] TGLs = 1-4

Bile Duct

Interstit Cell

Cardiomyopathy
Nephropathy

Hyperplasia

Inflammation
Adenoma

Mild
Moderate

Mild

Suppurative, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 189

TRT#: 7

SEX: Male

DAY ON TEST: 630

DOSE: 100MG/KG

DISP: Dead

HISTO: 860369

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver	Bile Duct	Fibrosis	Moderate
		Hyperplasia	Moderate
		Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 1-13,7-13			
Note: [HYPERPLASIA] TGLs = 1-13,7-13			
Note: [FIBROSIS] TGLs = 1-13,7-13			
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Mild
Stomach	Forestomach	Ulcer	Marked
	Glandular	Ulcer	Marked
Note: [ULCER] TGLs = 4-14			
Note: [ULCER] TGLs = 4-14,5-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 6-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 190

TRT#: 7

SEX: Male

DAY ON TEST: 618

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860370

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Mild
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cytologic Alterations	Moderate
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 1-13			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 191

TRT#: 7

SEX: Male

DAY ON TEST: 453

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860371

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Parathyroid Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pituitary Gland
Skin
Thymus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Nose
Prostate
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Pancreas
Salivary Glands
Stomach - Forestomach
Trachea

MISSING

Mammary Gland

Preputial Gland

OBSERVATIONS

Kidney
Liver

Hepatocyte
Bile Duct
Interstit Cell

Nephropathy
Degeneration
Hyperplasia
Adenoma

Mild
Granular, Minimal
Mild

Testes

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 192

TRT#: 7

SEX: Male

DAY ON TEST: 496

DOSE: 100MG/KG

DISP: Dead

HISTO: 860372

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Intestine Small Note: [ULCER] TGLs = 6-13	Duodenum	Ulcer	Marked
Kidney Note: [NEPHROPATHY] TGLs = 3-1		Nephropathy	Marked
Liver Note: [NECROSIS] TGLs = 5-2 Note: LIVER NECROSIS IS ACUTE HEMORRHAGIC.	Bile Duct	Fibrosis Hemorrhage Hyperplasia Necrosis	Mild Moderate Mild Coagulative, Moderate
Lung Lymph Node Nose Stomach Note: [ULCER] TGLs = 2-6 Note: [INFLAMMATION] TGLs = 2-6	Mandibular Olfactory Epi Forestomach Forestomach	Alveolar/Bronchiolar Adenoma Hyperplasia Degeneration Inflammation Ulcer	Lymphoid, Moderate Mild Suppurative, Moderate Marked
Testes Thymus Note: [ADENOMA] TGLs = 1-5 Note: THYMUS-MINIMAL TISSUE AVAILABLE.	Interstitial Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 192

TRT#: 7

SEX: Male

DAY ON TEST: 496

DOSE: 100MG/KG

DISP: Dead

HISTO: 860372

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 193

TRT#: 7

SEX: Male

DAY ON TEST: 595

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860373

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Testes
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver	Bile Duct	Fibrosis	Mild
		Hyperplasia	Moderate
		Necrosis	Coagulative, Mild
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 2-13			
Note: [ULCER] TGLs = 5-13			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 194

TRT#: 7

SEX: Male

DAY ON TEST: 601

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860374

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 1-1			
Liver	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 4-2			
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 7-13			
Note: [ULCER] TGLs = 5,6-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 195 **TRT#:** 7 **SEX:** Male **DAY ON TEST:** 631
DOSE: 100MG/KG **DISP:** Moribund **HISTO:** 860375

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Marked
[Nephropathy TGLS = 5-1]			
Liver		Cytologic Alterations	Moderate
		Eosinophilic Focus	Moderate
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Note: [EOSIN FOCUS] TGLs = 8-15			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 4-14,3-14			
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 1-9			
Stomach	Forestomach	Inflammation	Chronic, Moderate
	Forestomach	Ulcer	Marked
Note: [INFLAMMATION] TGLs = 7-13			
Note: [ULCER] TGLs = 6-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 196

TRT#: 7

SEX: Male

DAY ON TEST: 455

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860376

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Fatty Change	Mild
	Bile Duct	Hyperplasia	Minimal
Note: [FATTY CHANGE] TGLs = 3-2			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 197	TRT#: 7	SEX: Male	DAY ON TEST: 420
	DOSE: 100MG/KG	DISP: Moribund	HISTO: 860377

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Pancreas	Parathyroid Gland
Peripheral Nerve	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spinal Cord
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Mammary Gland	Thymus
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Mild
Testes	Interstit Cell	Adenoma	

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 198

TRT#: 7

SEX: Male

DAY ON TEST: 580

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860378

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney	Cortex	Cyst Nephropathy	Moderate Marked
Note: [NEPHROPATHY] TGLs = 7-1			
Liver	Bile Duct	Hyperplasia Hyperplasia	Marked Mild
Note: [HYPERPLASIA] TGLs = 3-13			
Lung		Hyperplasia	Macrophage, Mild
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Moderate
Note: [HYPERPLASIA] TGLs = 1-9			
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Mild
Spleen		Congestion Thrombosis	Marked Marked
Note: [CONGESTION] TGLs = 4-2			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 6-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 199

TRT#: 7

SEX: Male

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860379

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Epididymis
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Preputial Gland
Skin
Thymus

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Pancreas
Prostate
Spleen
Thyroid Gland

OBSERVATIONS

Kidney
Liver
Nose
Testes
Note: [ADENOMA] TGLs = 1-5

Bile Duct
Interstitial Cell

Nephropathy
Hyperplasia
Inflammation
Adenoma

Mild
Mild
Suppurative, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 200

TRT#: 7

SEX: Male

DAY ON TEST: 560

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860380

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Salivary Glands
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea		

MISSING

Prostate	Seminal Vesicle	Urinary Bladder
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OBSERVATIONS

Kidney Note: [NEPHROPATHY] TGLs = 1-1		Nephropathy	Marked
Liver	Bile Duct	Fibrosis Hyperplasia Necrosis	Moderate Moderate Coagulative, Mild
Nose	Respirat Epith	Hyperplasia Inflammation	Marked Suppurative, Mild
Stomach Note: [ULCER] TGLs = 2-6	Forestomach	Ulcer	Marked
Testes Note: [ADENOMA] TGLs = 4-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 201

TRT#: 7

SEX: Male

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Dead

HISTO: 860381

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Epididymis
Intestine Large - Rectum
Lymph Node - Mesenteric
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Nose
Seminal Vesicle
Thymus

Bone
Heart
Lung
Parathyroid Gland
Skin
Thyroid Gland

Bone Marrow
Intestine Large - Colon
Lymph Node - Mandibular
Prostate
Spleen
Trachea

MISSING

Intestine Large - Cecum
Mesentery

Intestine Small - Ileum
Preputial Gland

Intestine Small - Jejunum

Mammary Gland

AUTO PRECLUDES DIAG.

Brain

Islets, Pancreatic

Pancreas

OBSERVATIONS

Kidney
Note: [NEPHROPATHY] TGLs = 1-1
Liver

Nephropathy

Moderate

Pituitary Gland
Stomach
Testes

Pars Distalis
Forestomach
Interstit Cell

Cytologic Alterations
Fibrosis
Necrosis
Cyst
Mineralization
Hyperplasia

Minimal
Mild
Coagulative, Moderate
Mild
Mild
Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 202

TRT#: 7

SEX: Male

DAY ON TEST: 503

DOSE: 100MG/KG

DISP: Dead

HISTO: 860382

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Trachea

Adrenal Gland - Medulla
Epididymis
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Seminal Vesicle
Thymus

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Preputial Gland
Skin
Thyroid Gland

OBSERVATIONS

Kidney
Note: [NEPHROPATHY] TGLs = 5-1,4-1
Liver

Nephropathy

Marked

Fibrosis
Hemorrhage
Hyperplasia
Necrosis
Ulcer

Minimal
Moderate
Mild
Coagulative, Marked
Marked

Bile Duct

Stomach
Note: [ULCER] TGLs = 6-6

Forestomach

Testes
Note: [ADENOMA] TGLs = 1-5,3-5

Interstit Cell

Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 203

TRT#: 7

SEX: Male

DAY ON TEST: 485

DOSE: 100MG/KG

DISP: Moribund

HISTO: 86383

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Marked
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Mild
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Moderate
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 204

TRT#: 7

SEX: Male

DAY ON TEST: 525

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860384

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Trachea	Urinary Bladder		

MISSING

Tissue NOS

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Cytologic Alterations	Marked
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
Nose		Fungus	Moderate
		Inflammation	Suppurative, Moderate
Note: FUNGUS IS ASPERGILLUS.			
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 2-9			
Preputial Gland		Carcinoma	
	Duct	Dilatation	Moderate
Note: [CARCINOMA] TGLs = 3-5			
Note: [DILATATION] TGLs = 3-5			
Stomach	Forestomach	Ulcer	Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			
Thyroid Gland	C Cell	Hyperplasia	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 204

TRT#: 7

SEX: Male

DAY ON TEST: 525

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860384

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 205

TRT#: 7

SEX: Male

DAY ON TEST: 615

DOSE: 100MG/KG

DISP: Dead

HISTO: 860385

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Blood Vessel	Aorta	Mineralization	Moderate
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Marked
Note: LOBULAR DISTRIBUTION.			
Note: LIVER NECROSIS IS ACUTE & HAS A DIFFERENT			
Lymph Node	Mandibular	Infiltration Cellular	Histiocyte, Moderate
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Glandular	Mineralization	Moderate
	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 3-6			
Note: [MINERALIZATION] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 206

TRT#: 7

SEX: Male

DAY ON TEST: 496

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860386

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Pancreas	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Mammary Gland

OBSERVATIONS

Heart	Av Valve	Inflammation	Chronic, Mild
Kidney	Renal Tubule	Adenoma	
		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Moderate
Nose		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Cyst	Mild
Note: [CYST] TGLs = 4-4			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 6-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 207

TRT#: 7

SEX: Male

DAY ON TEST: 380

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860387

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Salivary Glands
Seminal Vesicle	Spleen	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Cytologic Alterations	Minimal
	Bile Duct	Hyperplasia	Minimal
Nose		Inflammation	Suppurative, Minimal
Prostate		Inflammation	Suppurative, Mild
Skin		Keratoacanthoma	
Note: [KERATOACANTHOMA] TGLs = 1-12			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 208

TRT#: 7

SEX: Male

DAY ON TEST: 518

DOSE: 100MG/KG

DISP: Dead

HISTO: 860388

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Pancreas	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Testes	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Mammary Gland

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum		

OBSERVATIONS

Kidney Note: [NEPHROPATHY] TGLs = 2-1		Nephropathy	Marked
Liver		Cytologic Alterations	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Mild
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland Note: [HYPERPLASIA] TGLs = 3-9		Hyperplasia	Mild
Stomach Note: [ULCER] TGLs = 1-6	Forestomach	Ulcer	Marked

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 209

TRT#: 7

SEX: Male

DAY ON TEST: 534

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860389

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Cytologic Alterations	Marked
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
Mesentery	Fat	Inflammation	Chronic, Marked
Nose		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-6			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 210

TRT#: 7

SEX: Male

DAY ON TEST: 607

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860390

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 7-1			
Liver		Cytologic Alterations	Moderate
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Suppurative, Moderate
		Necrosis	Coagulative, Minimal
Note: [INFLAMMATION] TGLs = 6-2			
Mesentery	Fat	Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 4-13			
Nose		Inflammation	Suppurative, Mild
Pancreas		Atrophy	Mild
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 9-9			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Stomach	Glandular	Inflammation	Suppurative, Moderate
	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 8-13			
Note: [ULCER] TGLs = 5-13			
Testes	Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 210

TRT#: 7

SEX: Male

DAY ON TEST: 607

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860390

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 211

TRT#: 7

SEX: Male

DAY ON TEST: 552

DOSE: 100MG/KG

DISP: Dead

HISTO: 860391

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Parathyroid Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Lymph Node - Mandibular	Preputial Gland
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Moderate
Nose		Inflammation	Suppurative, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 212

TRT#: 7

SEX: Male

DAY ON TEST: 572

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860392

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Mild
Pancreas		Infiltration Cellular	Lymphocyte, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 2-9			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 3-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 213

TRT#: 7

SEX: Male

DAY ON TEST: 533

DOSE: 100MG/KG

DISP: Dead

HISTO: 860393

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 7-1			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 5-2			
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Inflammation	Chronic, Mild
Note: [INFLAMMATION] TGLs = 6-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5,3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 214

TRT#: 7

SEX: Male

DAY ON TEST: 511

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860394

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Clear Cell Focus	Moderate
		Cytologic Alterations	Moderate
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Marked
		Hyperplasia	Moderate
		Necrosis	Coagulative, Mild
Note: [HYPERPLASIA] TGLs = 3-2,5-2			
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Marked
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Cyst	Moderate
Note: [CYST] TGLs = 4-4			
Skin		Squamous Cell Papilloma	
Note: [PAPILOMA SQUA] TGLs = 6-15			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 7-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 215

TRT#: 7

SEX: Male

DAY ON TEST: 551

DOSE: 100MG/KG

DISP: Dead

HISTO: 860395

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Inflammation	Suppurative, Mild
Note: [INFLAMMATION] TGLs = 6-2			
Mesentery	Fat	Inflammation	Suppurative, Mild
Nose		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 8-6			
Note: [ULCER] TGLs = 9-6			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5,3-5,4-5			
Tissue NOS		Inflammation	Chronic, Mild
Note: [INFLAMMATION] TGLs = 7-9			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 216

TRT#: 7

SEX: Male

DAY ON TEST: 453

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860396

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Mammary Gland
Nose	Pancreas	Parathyroid Gland	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-2			
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-3			
Note: [LEUKEMIA MONUC] TGLs = 4-12			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-14			
Note: [LEUKEMIA MONUC] TGLs = 5-9			
Note: [LEUKEMIA MONUC] TGLs = 5-9			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-13			
Note: [LEUKEMIA MONUC] TGLs = 2-13			
Testes	Interstit Cell	Hyperplasia	Mild
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 217

TRT#: 7

SEX: Male

DAY ON TEST: 455

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860397

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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	

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Fatty Change	Minimal
		Hyperplasia	Mild
Note: [FATTY CHANGE] TGLs = 2-2			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 218

TRT#: 7

SEX: Male

DAY ON TEST: 654

DOSE: 100MG/KG

DISP: Dead

HISTO: 860398

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 1-1]			
Liver		Basophilic Focus	
		Cytologic Alterations	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Lung	Alveolar Epith	Hyperplasia	Mild
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 6-9			
Pituitary Gland	Pars Distalis	Adenoma	
Skeletal Muscle		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 3-14			
Stomach	Glandular	Mineralization	Mild
	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 7-13,4-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 5-5			
Thymus		Inflammation	Suppurative, Mild
Tissue NOS			
Note: TNOS IS DIAPHRAGM.			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 218

TRT#: 7

SEX: Male

DAY ON TEST: 654

DOSE: 100MG/KG

DISP: Dead

HISTO: 860398

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 219

TRT#: 7

SEX: Male

DAY ON TEST: 567

DOSE: 100MG/KG

DISP: Dead

HISTO: 860399

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large - Rectum	Intestine Small - Duodenum	Islets, Pancreatic	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Parathyroid Gland

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Ileum	Intestine Small - Jejunum
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OBSERVATIONS

Kidney Note: [NEPHROPATHY] TGLs = 1-1		Nephropathy	Marked
Liver	Bile Duct	Fibrosis Hyperplasia Necrosis	Moderate Mild Coagulative, Moderate
Nose		Inflammation	Suppurative, Mild
Stomach	Forestomach Glandular Forestomach	Inflammation Inflammation Ulcer	Chronic, Mild Chronic, Mild Moderate
Note: [INFLAMMATION] TGLs = 4-6 Note: [ULCER] TGLs = 2-6			
Testes Note: [ADENOMA] TGLs = 3-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 220

TRT#: 7

SEX: Male

DAY ON TEST: 307

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860400

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Kidney		Nephropathy	Minimal
Note: [NEPHROPATHY] TGLs = 4-1			
Note: [NEPHROPATHY] TGLs = 5-1			
Liver	Hepatocyte	Degeneration	Granular, Moderate
	Bile Duct	Hyperplasia	Minimal
Nose		Inflammation	Suppurative, Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 6-6			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 221

TRT#: 7

SEX: Male

DAY ON TEST: 453

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860401

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Thymus

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Hepatocellular Adenoma	
	Bile Duct	Hyperplasia	Minimal
Note: [HEPATOCLR ADEN] TGLs = 1-2			
Preputial Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 3-5			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
[Adenoma TGLS = 4-5]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 222

TRT#: 7

SEX: Male

DAY ON TEST: 660

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860402

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Liver	Lung	Lymph Node - Mandibular
Mammary Gland	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Intestine Large	Colon	Mesothelioma Nos	
Note: [MESOTHELIO NOS] TGLs = 11-6			
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 9-1,10-1,2-1			
Lymph Node	Mediastinal	Pigmentation	Moderate
	Mesenteric	Pigmentation	Hemosiderin, Moderate
Mesentery		Mesothelioma Nos	
Note: [MESOTHELIO NOS] TGLs = 7-17			
Nose		Hemorrhage	Moderate
		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Moderate
Spleen		Pigmentation	Hemosiderin, Moderate
Stomach	Forestomach	Mesothelioma Nos	
Note: [MESOTHELIO BGN] TGLs = 8-6			
Note: MESOTHELIOOMA INVOLVES ABDOMINAL PERITONEAL WALL, SCROTAL			
Note: [MESOTHELIO NOS] TGLs = 8-6			
Note: SMALL AND LARGE BOWEL.			
Note: VISCERAL SURFACE, SEROSA SURFACE OF STOMACH,			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 222

TRT#: 7

SEX: Male

DAY ON TEST: 660

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860402

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 223

TRT#: 7

SEX: Male

DAY ON TEST: 477

DOSE: 100MG/KG

DISP: Dead

HISTO: 860403

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Epididymis	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Brain	Meninges	Hemorrhage	Moderate
Note: [HEMORRHAGE] TGLs = 10-7			
Heart		Cardiomyopathy	Moderate
Intestine Small	Duodenum	Ulcer	Marked
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cyst	Moderate
		Cytologic Alterations	Moderate
		Fibrosis	Moderate
		Hemorrhage	Moderate
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 7-2			
Note: [CYST] TGLs = 4-13			
Note: [HEMORRHAGE] TGLs = 5-14			
Mesentery	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 8-15			
Nose		Inflammation	Suppurative, Mild
Pancreas		Inflammation	Suppurative, Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 9-6			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 223

TRT#: 7
DOSE: 100MG/KG

SEX: Male
DISP: Dead

DAY ON TEST: 477
HISTO: 860403

ORGAN AND ACCOUNTABLE SITE STATUS

Testes	Interstit Cell	Adenoma
Note: [ADENOMA] TGLs = 1-5,2-5		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 224

TRT#: 7

SEX: Male

DAY ON TEST: 492

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860404

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Note: [CARDIOMYOPATHY] TGLs = 4-2			
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 3-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 225

TRT#: 7

SEX: Male

DAY ON TEST: 512

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860405

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
Lymph Node	Mandibular	Edema	Marked
	Mandibular	Hyperplasia	Lymphoid, Moderate
Note: [EDEMA] TGLs = 3-14			
Nose		Fungus	Marked
		Inflammation	Suppurative, Mild
Note: NOSE:ASPERGILLOSIS			
Preputial Gland	Duct	Dilatation	Moderate
Note: [DILATATION] TGLs = 1-5			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5,5-5			
Zymbal's Gland		Carcinoma	
Note: [CARCINOMA] TGLs = 2-13			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 226

TRT#: 7

SEX: Male

DAY ON TEST: 455

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860406

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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			

OBSERVATIONS

Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 2-1			
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Note: [FATTY CHANGE] TGLs = 3-2			
Nose		Inflammation	Suppurative, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Prostate		Inflammation	Suppurative, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 227

TRT#: 7

SEX: Male

DAY ON TEST: 580

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860407

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Salivary Glands	Seminal Vesicle	Skin
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Preputial Gland

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Mild
		Fibrosis	Minimal
	Bile Duct	Hemangiosarcoma	
		Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Note: [HEMANGIOSARC] TGLs = 3-13,6-13,7-13			
Note: LIVER MASS ALSO ATTACHED TO DIAPHRAM.			
Lymph Node	Mediastinal	Hemorrhage	Moderate
Note: [HEMORRHAGE] TGLs = 8-4			
Nose		Inflammation	Suppurative, Minimal
Parathyroid Gland		Hyperplasia	Moderate
Prostate		Inflammation	Chronic, Moderate
Spleen		Hemangiosarcoma	
Note: [HEMANGIOSARC] TGLs = 4-15			
Stomach	Forestomach	Squamous Cell Papilloma	
Note: [PAPILOMA SQUA] TGLs = 9-6			
Testes	Interstit Cell	Adenoma	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 227

TRT#: 7

SEX: Male

DAY ON TEST: 580

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860407

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 228

TRT#: 7

SEX: Male

DAY ON TEST: 618

DOSE: 100MG/KG

DISP: Dead

HISTO: 860408

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Jejunum	Islets, Pancreatic	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Ileum
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OBSERVATIONS

Heart		Cardiomyopathy	Marked
Note: [INFLAMMATION] TGLs = 6-13			
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Cytologic Alterations	Minimal
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 5-2			
Stomach	Forestomach	Ulcer	Marked
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 4-6			
Note: [ULCER] TGLs = 7-14			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 229	TRT#: 7	SEX: Male	DAY ON TEST: 517
	DOSE: 100MG/KG	DISP: Dead	HISTO: 860409

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large - Rectum	Islets, Pancreatic	Lung	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Lymph Node - Mandibular	Parathyroid Gland
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AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum			

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Moderate
Nose		Inflammation	Suppurative, Marked
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 230

TRT#: 7

SEX: Male

DAY ON TEST: 611

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860410

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Marked
[Nephropathy TGLS = 5-1]			
Liver		Basophilic Focus	
		Cytologic Alterations	Minimal
		Eosinophilic Focus	
		Fatty Change	Marked
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Minimal
Note: [HYPERPLASIA] TGLs = 11-13			
Lymph Node	Lumbar	Hemorrhage	Mild
Note: [HEMORRHAGE] TGLs = 6-15			
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 1-9			
Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 7-4]			
Spleen		Amyloid Deposition	Mild
Note: [AMYLOID DEP] TGLs = 3-14			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 12-6			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 230

TRT#: 7
DOSE: 100MG/KG

SEX: Male
DISP: Moribund

DAY ON TEST: 611
HISTO: 860410

ORGAN AND ACCOUNTABLE SITE STATUS

Testes
[Adenoma TGLS = 2-5]

Interstit Cell

Adenoma

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 231

TRT#: 7

SEX: Male

DAY ON TEST: 518

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860411

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cytologic Alterations	Marked
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 2-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 232

TRT#: 7

SEX: Male

DAY ON TEST: 611

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860412

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cytologic Alterations	Moderate
		Developmental Malformation	
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Note: [DEVELOP MALFOR] TGLs = 2-2			
Nose		Fungus	Marked
		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Moderate
Spleen		Pigmentation	Hemosiderin, Mild
Note: [PIGMENT] TGLs = 6-2			
Stomach	Glandular	Mineralization	Mild
	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 4-6			
Note: [MINERALIZATION] TGLs = 5-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 233

TRT#: 7

SEX: Male

DAY ON TEST: 643

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860413

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Note: [CARDIOMYOPATHY] TGLs = 8-3			
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cytologic Alterations	Moderate
		Developmental Malformation	
	Bile Duct	Fibrosis	Mild
		Hyperplasia	Mild
		Necrosis	Coagulative, Moderate
Note: [DEVELOP MALFOR] TGLs = 4-2			
Note: [NECROSIS] TGLs = 5-2,6-2			
Nose		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Moderate
Preputial Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-13			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 9-6			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Tongue		Necrosis	Zenkers, Mild
Note: [NECROSIS] TGLs = 7-15			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 233

TRT#: 7

SEX: Male

DAY ON TEST: 643

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860413

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 234

TRT#: 7

SEX: Male

DAY ON TEST: 552

DOSE: 100MG/KG

DISP: Dead

HISTO: 860414

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Islets, Pancreatic
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Pancreas	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	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		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 4-1			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Moderate
Nose		Inflammation	Suppurative, Mild
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 3-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Tissue NOS			
Note: MASS DESCRIBED AS IN MESENTERY IS TNOS AND IS			
Note: TUMOR AND AUTOLYSIS MAKES DX IMPOSSIBLE			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 235

TRT#: 7

SEX: Male

DAY ON TEST: 566

DOSE: 100MG/KG

DISP: Dead

HISTO: 860415

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Islets, Pancreatic
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Nose	Pancreas	Parathyroid Gland	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Marked
Lymph Node	Lumbar	Hemorrhage	Moderate
Note: [HEMORRHAGE] TGLs = 1-14			
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 4-6,7-6			
Note: [ULCER] TGLs = 4-6,6-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 5-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 236

TRT#: 7

SEX: Male

DAY ON TEST: 650

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860416

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 4-1			
Liver		Basophilic Focus	
		Cytologic Alterations	Mild
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
		Hyperplasia	Mild
Parathyroid Gland			
Note: [HYPERPLASIA] TGLs = 8-9			
Stomach	Forestomach	Inflammation	Chronic, Mild
Note: [INFLAMMATION] TGLs = 6-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 237

TRT#: 7

SEX: Male

DAY ON TEST: 455

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860417

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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	

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Fatty Change	Minimal
		Hyperplasia	Mild
Note: [FATTY CHANGE] TGLs = 1-2			
Note: [FATTY CHANGE] TGLs = 2-2			
Testes	Interstitial Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 238

TRT#: 7

SEX: Male

DAY ON TEST: 638

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860418

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Developmental Malformation	
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Mild
		Mineralization	Moderate
		Necrosis	Coagulative, Mild
Note: [DEVELOP MALFOR] TGLs = 4-2			
Note: MINERALIZATION IN AREA OF COAGULATIVE NECROSIS & FIBROSIS			
Note: [NECROSIS] TGLs = 5-2,7-2			
Note: [MINERALIZATION] TGLs = 7-14			
Mammary Gland		Adenoma	
Note: [ADENOMA] TGLs = 1-13			
Nose		Inflammation	Suppurative, Moderate
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Glandular	Mineralization	Marked
	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 6-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 238

TRT#: 7

SEX: Male

DAY ON TEST: 638

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860418

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

Animal Note: MINERALIZATION IN AREA OF COAGULATION NECROSIS

Animal Note: & FIBROSIS HEPATODIAPHRAGMATIC MALFORMATION

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 239

TRT#: 7

SEX: Male

DAY ON TEST: 646

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860419

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 2-1]			
Liver		Cytologic Alterations	Moderate
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Lymph Node	Lumbar	Hemorrhage	Moderate
Note: [HEMORRHAGE] TGLs = 4-14			
Nose		Inflammation	Suppurative, Moderate
Stomach	Forestomach	Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 5-13,6-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Urinary Bladder		Inflammation	Suppurative, Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 240

TRT#: 7

SEX: Male

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860420

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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	

OBSERVATIONS

Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Mild
Note: [FATTY CHANGE] TGLs = 2-3			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 241

TRT#: 9

SEX: Male

DAY ON TEST: 275

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860481

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Heart
Pancreas
Seminal Vesicle
Thyroid Gland

Adrenal Gland - Medulla
Lung
Parathyroid Gland
Spleen
Urinary Bladder

Brain
Lymph Node - Mandibular
Pituitary Gland
Stomach - Forestomach

Epididymis
Lymph Node - Mesenteric
Prostate
Stomach - Glandular

OBSERVATIONS

Kidney
Liver
Testes

Interstitial Cell

Nephropathy
Clear Cell Focus
Hyperplasia

Minimal

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 242	TRT#: 9	SEX: Male	DAY ON TEST: 274
	DOSE: 0 MG/KG 39 KILL	DISP: Interval Sacrifice	HISTO: 860482

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Liver	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 243	TRT#: 9	SEX: Male	DAY ON TEST: 274
	DOSE: 0 MG/KG 39 KILL	DISP: Interval Sacrifice	HISTO: 860483

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Lung	Lymph Node - Mandibular	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 244

TRT#: 9

SEX: Male

DAY ON TEST: 274

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860484

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Lung
Pituitary Gland
Stomach - Glandular

Adrenal Gland - Medulla
Lymph Node - Mandibular
Prostate
Thyroid Gland

Brain
Pancreas
Spleen
Urinary Bladder

Epididymis
Parathyroid Gland
Stomach - Forestomach

OBSERVATIONS

Heart
Kidney
Liver

Seminal Vesicle
Note: [ATROPHY] TGLs = 2-12
Testes
Note: [ATROPHY] TGLs = 1-5

Bile Duct

Seminif Tub

Cardiomyopathy
Nephropathy
Fatty Change
Hyperplasia
Atrophy

Atrophy

Mild
Minimal
Minimal
Minimal
Moderate

Marked

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 245

TRT#: 9

SEX: Male

DAY ON TEST: 216

DOSE: 0 MG/KG 39 KILL

DISP: Dead

HISTO: 860485

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Islets, Pancreatic
Pancreas
Prostate
Spinal Cord
Testes
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Liver
Parathyroid Gland
Salivary Glands
Spleen
Thymus

Bone
Esophagus
Lymph Node - Mandibular
Pituitary Gland
Seminal Vesicle
Stomach - Forestomach
Thyroid Gland

Bone Marrow
Heart
Lymph Node - Mesenteric
Preputial Gland
Skin
Stomach - Glandular
Trachea

MISSING

Intestine Small - Duodenum

Mammary Gland

AUTO PRECLUDES DIAG.

Intestine Large - Cecum
Intestine Small - Jejunum

Intestine Large - Colon
Kidney

Intestine Large - Rectum
Nose

Intestine Small - Ileum

OBSERVATIONS

Lung
Note: [CONGESTION] TGLs = 1-3

Congestion

Marked

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 246	TRT#: 9	SEX: Male	DAY ON TEST: 274
	DOSE: 0 MG/KG 39 KILL	DISP: Interval Sacrifice	HISTO: 860486

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 247	TRT#: 9	SEX: Male	DAY ON TEST: 274
	DOSE: 0 MG/KG 39 KILL	DISP: Interval Sacrifice	HISTO: 860487

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Testes	Interstit Cell	Hyperplasia	Minimal
Thyroid Gland	Follicular Cel	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 248	TRT#: 9	SEX: Male	DAY ON TEST: 70
	DOSE: 0 MG/KG 39 KILL	DISP: Gavage Death	HISTO: 860488

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Jejunum
Islets, Pancreatic	Kidney	Liver	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spinal Cord	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Intestine Small - Ileum

OBSERVATIONS

Heart	Cardiomyopathy	Mild
Lung	Congestion	Marked
Note: [CONGESTION] TGLs = 1-3		
Pancreas	Atrophy	Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 249

TRT#: 9

SEX: Male

DAY ON TEST: 275

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860489

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Liver
Parathyroid Gland
Spleen
Urinary Bladder

Adrenal Gland - Medulla
Lung
Pituitary Gland
Stomach - Forestomach

Brain
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Epididymis
Pancreas
Seminal Vesicle
Thyroid Gland

OBSERVATIONS

Heart
Kidney
Testes

Interstitial Cell

Cardiomyopathy
Nephropathy
Hyperplasia

Mild
Minimal
Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 250	TRT#: 9	SEX: Male	DAY ON TEST: 274
	DOSE: 0 MG/KG 39 KILL	DISP: Interval Sacrifice	HISTO: 860490

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lymph Node - Mandibular	Pancreas	Prostate
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Testes	Thyroid Gland	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Lung		Inflammation	Granulomatous, Moderate
Mesentery	Fat	Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 2-12			
Pituitary Gland	Pars Distalis	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 251

TRT#: 9

SEX: Male

DAY ON TEST: 275

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860491

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Liver
Parathyroid Gland
Spleen
Urinary Bladder

Adrenal Gland - Medulla
Lung
Pituitary Gland
Stomach - Forestomach

Brain
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Epididymis
Pancreas
Seminal Vesicle
Thyroid Gland

OBSERVATIONS

Heart
Kidney
Testes

Interstitial Cell

Cardiomyopathy
Nephropathy
Hyperplasia

Moderate
Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 252	TRT#: 9	SEX: Male	DAY ON TEST: 275
	DOSE: 0 MG/KG 39 KILL	DISP: Interval Sacrifice	HISTO: 860492

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Testes
Thyroid Gland	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 253

TRT#: 9

SEX: Male

DAY ON TEST: 274

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860493

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Liver
Parathyroid Gland
Spleen
Urinary Bladder

Adrenal Gland - Medulla
Lung
Pituitary Gland
Stomach - Forestomach

Brain
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Epididymis
Pancreas
Seminal Vesicle
Thyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 254

TRT#: 9

SEX: Male

DAY ON TEST: 274

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860494

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Liver
Parathyroid Gland
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Lung
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Brain
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Epididymis
Pancreas
Seminal Vesicle
Testes

OBSERVATIONS

Heart
Kidney

Cardiomyopathy
Nephropathy

Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 255

TRT#: 9

SEX: Male

DAY ON TEST: 275

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860495

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Liver
Parathyroid Gland
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Lung
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Brain
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Epididymis
Pancreas
Seminal Vesicle
Testes

OBSERVATIONS

Heart
Kidney

Cardiomyopathy
Nephropathy

Mild
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 256

TRT#: 9

SEX: Male

DAY ON TEST: 274

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860496

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Heart
Pancreas
Seminal Vesicle
Thyroid Gland

Adrenal Gland - Medulla
Liver
Parathyroid Gland
Spleen
Urinary Bladder

Brain
Lung
Pituitary Gland
Stomach - Forestomach

Epididymis
Lymph Node - Mandibular
Prostate
Stomach - Glandular

OBSERVATIONS

Kidney		Nephropathy	Minimal
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 257	TRT#: 9	SEX: Male	DAY ON TEST: 274
	DOSE: 0 MG/KG 39 KILL	DISP: Interval Sacrifice	HISTO: 860497

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland	Brain	Epididymis	Liver
Lung	Lymph Node - Mandibular	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 258

TRT#: 9

SEX: Male

DAY ON TEST: 50

DOSE: 0 MG/KG 39 KILL

DISP: Gavage Death

HISTO: 860498

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Liver
Pancreas
Prostate
Spinal Cord
Testes
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Parathyroid Gland
Salivary Glands
Spleen
Thymus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Pituitary Gland
Seminal Vesicle
Stomach - Forestomach
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Kidney
Mammary Gland
Preputial Gland
Skin
Stomach - Glandular
Trachea

OBSERVATIONS

Lung
Note: [CONGESTION] TGLs = 1-3
Nose

Congestion
Marked
Congestion
Marked

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 259

TRT#: 9

SEX: Male

DAY ON TEST: 275

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860499

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Heart
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Adrenal Gland - Medulla
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Brain
Pancreas
Seminal Vesicle
Testes

Epididymis
Parathyroid Gland
Spleen
Thyroid Gland

OBSERVATIONS

Kidney
Liver
Lung

Nephropathy
Fatty Change
Inflammation

Minimal
Mild
Granulomatous, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 260

TRT#: 9

SEX: Male

DAY ON TEST: 275

DOSE: 0 MG/KG 39 KILL

DISP: Interval Sacrifice

HISTO: 860500

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Lung
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Adrenal Gland - Medulla
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Brain
Pancreas
Seminal Vesicle
Testes

Epididymis
Parathyroid Gland
Spleen
Thyroid Gland

OBSERVATIONS

Heart
Kidney
Liver

Cardiomyopathy
Nephropathy
Fatty Change
Hyperplasia

Mild
Minimal
Minimal
Minimal

Bile Duct

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 261	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860501

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Testes
Thyroid Gland	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 262	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860502

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Multifocal, Minimal
Mesentery	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 1-12			
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 263	TRT#: 10	SEX: Male	DAY ON TEST: 274
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860503

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Multifocal, Minimal
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 264

TRT#: 10

SEX: Male

DAY ON TEST: 275

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860504

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Heart
Parathyroid Gland
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Lung
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Brain
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Epididymis
Pancreas
Seminal Vesicle
Testes

OBSERVATIONS

Kidney
Liver

Hepatocyte
Bile Duct

Nephropathy
Cytomegaly
Hyperplasia
Necrosis

Mild
Minimal
Mild
Multifocal, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 265	TRT#: 10	SEX: Male	DAY ON TEST: 274
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860505

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Lung	Lymph Node - Mandibular	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Mild
Testes	Interstitial Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 266	TRT#: 10	SEX: Male	DAY ON TEST: 274
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860506

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Testes	Interstitial Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 267	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860507

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Clear Cell Focus	
	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Mild
Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 268	TRT#: 10	SEX: Male	DAY ON TEST: 20
	DOSE: 100MG/KG	DISP: Gavage Death	HISTO: 860508

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Kidney
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spinal Cord
Spleen	Stomach - Forestomach	Stomach - Glandular	Testes
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Liver		Inflammation	Chronic, Mild
Lung		Congestion	Moderate
Note: [CONGESTION] TGLs = 1-3			
Nose	Nasolacrim Dct	Inflammation	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 269	TRT#: 10	SEX: Male	DAY ON TEST: 274
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860509

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Mild
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 270

TRT#: 10

SEX: Male

DAY ON TEST: 274

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860510

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Lung
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Adrenal Gland - Medulla
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Brain
Pancreas
Seminal Vesicle
Testes

Epididymis
Parathyroid Gland
Spleen
Thyroid Gland

OBSERVATIONS

Heart
Kidney
Liver

Hepatocyte

Cardiomyopathy
Nephropathy
Cytomegaly
Necrosis

Minimal
Mild
Minimal
Coagulative, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 271

TRT#: 10

SEX: Male

DAY ON TEST: 274

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860511

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Lung
Pituitary Gland
Stomach - Forestomach

Adrenal Gland - Medulla
Lymph Node - Mandibular
Prostate
Stomach - Glandular

Brain
Pancreas
Seminal Vesicle
Thyroid Gland

Epididymis
Parathyroid Gland
Spleen
Urinary Bladder

OBSERVATIONS

Heart
Kidney
Liver

Hepatocyte
Bile Duct

Testes

Interstitial Cell

Cardiomyopathy
Nephropathy
Cytomegaly
Hyperplasia
Necrosis
Hyperplasia

Mild
Mild
Minimal
Minimal
Coagulative, Mild
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 272	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860512

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Pancreas	Parathyroid Gland	Pituitary Gland	Prostate
Seminal Vesicle	Spleen	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Multifocal, Mild
Testes	Interstitial Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 273

TRT#: 10

SEX: Male

DAY ON TEST: 83

DOSE: 100MG/KG

DISP: Gavage Death

HISTO: 860513

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spinal Cord
Spleen	Stomach - Forestomach	Stomach - Glandular	Testes
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Minimal
Lung		Congestion	Moderate
Note: [CONGESTION] TGLs = 1-3			
Nose	Nasolacrim Dct	Inflammation	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 274	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860514

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Lung	Lymph Node - Mandibular	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Moderate
Liver		Clear Cell Focus	
	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
Testes	Interstitial Cell	Hyperplasia	Minimal
Urinary Bladder		Calculus Gross Observation	

Note: [CALCUS GRO OBS] TGLs = 1-12

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 275	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860515

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Lung	Lymph Node - Mandibular	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Focal, Minimal
		Necrosis	Coagulative, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 276	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860516

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Lung	Lymph Node - Mandibular	Pancreas	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Testes	Interstitial Cell	Adenoma	
	Interstitial Cell	Hyperplasia	Mild
Urinary Bladder		Calculus Gross Observation	

Note: [CALCUS GRO OBS] TGLs = 1-12

Note: [CALCUS GRO OBS] TGLs = 2-12

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 277	TRT#: 10	SEX: Male	DAY ON TEST: 274
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860517

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Heart	Lung	Lymph Node - Mandibular	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Mild
Testes	Interstitial Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 278	TRT#: 10	SEX: Male	DAY ON TEST: 274
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860518

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Lymph Node - Mandibular	Pancreas	Parathyroid Gland	Pituitary Gland
Prostate	Seminal Vesicle	Spleen	Stomach - Forestomach
Stomach - Glandular	Thyroid Gland	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Moderate
Lung		Hemorrhage	Moderate
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 279	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860519

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Lung	Lymph Node - Mandibular	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Multifocal, Mild
Testes	Interstitial Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 280	TRT#: 10	SEX: Male	DAY ON TEST: 275
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860520

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Brain	Epididymis
Lung	Lymph Node - Mandibular	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Seminal Vesicle	Spleen
Stomach - Forestomach	Stomach - Glandular	Thyroid Gland	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytomegaly	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Multifocal, Minimal
Testes	Interstitial Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 281

TRT#: 11

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860521

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lymph Node - Mandibular
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

OBSERVATIONS

Kidney [Nephropathy TGLS = 2-1]		Nephropathy	Marked
Liver	Bile Duct	Fatty Change Hyperplasia Squamous Cell Carcinoma	Moderate Mild
Lung Note: ORIGIN IS NOT IDENTIFIED. Note: [SQUAM CEL CARC] TGLs = 1-13 Note: SQ. CELL CA IN LUNG IS MOST LIKELY METASTATIC.			
Mesentery Note: [INFLAMMATION] TGLs = 5-14	Fat	Inflammation	Chronic, Marked
Pituitary Gland Note: [ADENOMA] TGLs = 3-4	Pars Distalis	Adenoma	
Stomach Note: [ULCER] TGLs = 4-14	Forestomach	Ulcer	Marked
Testes Note: [ADENOMA] TGLs = 6-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 282

TRT#: 11

SEX: Male

DAY ON TEST: 618

DOSE: 100MG/KG 39 STOP

DISP: Moribund

HISTO: 860522

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Eye		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 4-13			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 2-1]			
Liver	Bile Duct	Hyperplasia	Mild
Nose		Inflammation	Suppurative, Moderate
Stomach	Forestomach	Inflammation	Chronic, Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 283

TRT#: 11

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860523

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Seminal Vesicle
Thymus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Preputial Gland
Skin
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Prostate
Spleen
Trachea

OBSERVATIONS

Kidney
[Nephropathy TGLS = 3-1]
Liver
Mesentery
Note: [INFLAMMATION] TGLs = 5-13
Pituitary Gland
Stomach
Note: [ULCER] TGLs = 4-13,7-13
Testes
Note: [ATROPHY] TGLs = 1-5
Note: [ADENOMA] TGLs = 2-5

Fat
Pars Distalis
Forestomach
Forestomach
Interstitial Cell

Nephropathy
Fatty Change
Inflammation
Adenoma
Hyperkeratosis
Ulcer
Adenoma
Atrophy

Marked
Mild
Chronic, Moderate
Moderate
Marked
Marked

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 284

TRT#: 11

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860524

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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 - Mandibular	Lymph Node - Mesenteric
Nose	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Developmental Malformation	
	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [DEVELOP MALFOR] TGLs = 5-2 [Developmental Malformation TGLs = 6-2]			
Lung	Alveolar Epith	Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 2-14,9-14			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pancreas		Adenoma	
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 7-4			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-2			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			
Tongue		Squamous Cell Papilloma	
Note: [PAPILOMA SQUA] TGLs = 8-14			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 284

TRT#: 11

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860524

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 285

TRT#: 11

SEX: Male

DAY ON TEST: 730

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860525

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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 - Mandibular	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

OBSERVATIONS

Adrenal Gland	Cortex	Congestion	Moderate
	Medulla	Pheochromocytoma Benign	
Note: [CONGESTION] TGLs = 6-4			
Note: [PHEOCHROM BGN] TGLs = 6-4			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 9-1]			
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Lung	Alveolar Epith	Hyperplasia	Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 2-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 8-4			
Prostate		Hyperplasia	Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5,4-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 286

TRT#: 11

SEX: Male

DAY ON TEST: 583

DOSE: 100MG/KG 39 STOP

DISP: Dead

HISTO: 860526

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Esophagus
Lung
Nose
Preputial Gland
Skin
Thymus

Adrenal Gland - Medulla
Intestine Large - Colon
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Thyroid Gland

Bone
Intestine Large - Rectum
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Trachea

Brain
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

AUTO PRECLUDES DIAG.

Bone Marrow
Intestine Small - Jejunum

Intestine Large - Cecum

Intestine Small - Duodenum

Intestine Small - Ileum

OBSERVATIONS

Epididymis
Heart
Kidney
Liver

Mesentery
Testes
Note: [ADENOMA] TGLs = 2-5
Tissue NOS
Note: [MESOTHELIO NOS] TGLs = 3-13

Bile Duct

Interstit Cell

Mesothelioma Nos
Cardiomyopathy
Nephropathy
Hyperplasia
Necrosis
Mesothelioma Nos
Adenoma

Mesothelioma Nos

Moderate
Mild
Mild
Coagulative, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 287

TRT#: 11

SEX: Male

DAY ON TEST: 520

DOSE: 100MG/KG 39 STOP

DISP: Moribund

HISTO: 860527

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Preputial Gland

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver	Bile Duct	Hyperplasia	Mild
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Stomach	Forestomach	Inflammation	Suppurative, Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 288

TRT#: 11

SEX: Male

DAY ON TEST: 730

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860528

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Developmental Malformation	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
Note: [DEVELOP MALFOR] TGLs = 4-2			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 1-14			
Nose		Fungus	Mild
Note: FUNGUS IS ASPERGILLUS			
Spleen		Developmental Malformation	
Note: [DEVELOP MALFOR] TGLs = 3-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 290

TRT#: 11

SEX: Male

DAY ON TEST: 307

DOSE: 100MG/KG 39 STOP

DISP: Dead

HISTO: 860530

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Epididymis
Lung
Parathyroid Gland
Salivary Glands
Testes
Urinary Bladder

Adrenal Gland - Medulla
Esophagus
Lymph Node - Mandibular
Pituitary Gland
Seminal Vesicle
Thymus

Bone
Heart
Lymph Node - Mesenteric
Preputial Gland
Skin
Thyroid Gland

Bone Marrow
Liver
Mammary Gland
Prostate
Spleen
Trachea

MISSING

Intestine Large - Rectum

Intestine Small - Jejunum

AUTO PRECLUDES DIAG.

Brain
Intestine Small - Ileum
Stomach - Glandular

Intestine Large - Cecum
Islets, Pancreatic

Intestine Large - Colon
Pancreas

Intestine Small - Duodenum
Stomach - Forestomach

OBSERVATIONS

Kidney
Nose

Nephropathy
Inflammation

Minimal
Suppurative, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 291

TRT#: 11

SEX: Male

DAY ON TEST: 619

DOSE: 100MG/KG 39 STOP

DISP: Dead

HISTO: 860531

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Brain	Epididymis	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic	Mammary Gland
Nose	Parathyroid Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-3			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Mesentery	Fat	Leukemia Mononuclear	
Pancreas		Atrophy	Mild
Pituitary Gland		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-13			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 5-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 292

TRT#: 11

SEX: Male

DAY ON TEST: 688

DOSE: 100MG/KG 39 STOP

DISP: Moribund

HISTO: 860532

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
Epididymis	Esophagus	Lymph Node - Mandibular	Mammary Gland
Nose	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Bone Marrow		Hyperplasia	Mononuclear CI, Mild
Heart		Cardiomyopathy	Mild
		Fibrosis	Moderate
Intestine Large	Cecum	Leukemia Mononuclear	
	Colon	Leukemia Mononuclear	
	Rectum	Leukemia Mononuclear	
Intestine Small	Duodenum	Leukemia Mononuclear	
	Ileum	Leukemia Mononuclear	
	Jejunum	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 7-6			
Islets, Pancreatic		Leukemia Mononuclear	
Kidney		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Lymph Node	Lumbar	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-15			
Note: [LEUKEMIA MONUC] TGLs = 6-4			
Mesentery	Fat	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 8-16			
Pancreas		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-9			
Parathyroid Gland		Hyperplasia	Mild

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 292

TRT#: 11

SEX: Male

DAY ON TEST: 688

DOSE: 100MG/KG 39 STOP

DISP: Moribund

HISTO: 860532

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [HYPERPLASIA] TGLs = 1-9

Spleen

Leukemia Mononuclear

Note: [LEUKEMIA MONUC] TGLs = 3-13,10-13

Stomach

Forestomach

Leukemia Mononuclear

Glandular

Leukemia Mononuclear

Note: [LEUKEMIA MONUC] TGLs = 9-16

Testes

Interstit Cell

Adenoma

Note: [ADENOMA] TGLs = 2-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 293

TRT#: 11

SEX: Male

DAY ON TEST: 588

DOSE: 100MG/KG 39 STOP

DISP: Dead

HISTO: 860533

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Parathyroid Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Note: [ADENOMA] TGLs = 3-9			
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 4-1			
Liver	Bile Duct	Hyperplasia	Minimal
Preputial Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 1-5			
Stomach	Forestomach	Hyperkeratosis	Moderate
	Forestomach	Inflammation	Chronic, Moderate
	Glandular	Inflammation	Chronic, Mild
Note: [HYPERKERATOSIS] TGLs = 6-6			
Note: [INFLAMMATION] TGLs = 5-6			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 294	TRT#: 11	SEX: Male	DAY ON TEST: 49
	DOSE: 100MG/KG 39 STOP	DISP: Gavage Death	HISTO: 860534

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Intestine Large - Rectum	Spleen
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OBSERVATIONS

Heart	Cardiomyopathy	Minimal
Kidney	Nephropathy	Minimal
Lung	Emphysema	Mild

Note: [EMPHYSEMA] TGLs = 1-3

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 295 **TRT#:** 11 **SEX:** Male **DAY ON TEST:** 680
DOSE: 100MG/KG 39 STOP **DISP:** Moribund **HISTO:** 860535

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Blood	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 - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Blood Vessel	Aorta	Mineralization	Marked
	Mesent Artery	Mineralization	Marked
Note: [MINERALIZATION] TGLs = 4-14			
Note: [MINERALIZATION] TGLs = 3-15,5-15			
Heart		Cardiomyopathy	Marked
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 1-1]			
Liver	Bile Duct	Hyperplasia	Minimal
Lung		Fibrosis	Mild
Parathyroid Gland		Adenoma	
Note: [ADENOMA] TGLs = 2-9			
Stomach	Forestomach	Cyst Epithelial Inclusion	
	Glandular	Mineralization	Marked
Note: [CYST EPITH INC] TGLs = 9-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 8-5			
Thyroid Gland	Follicular Cel	Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 296

TRT#: 11

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860536

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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 - Mesenteric	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Preputial Gland	Prostate
Salivary Glands	Skin	Stomach - Forestomach	Thyroid Gland
Trachea			

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Leukemia Mononuclear	
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 5-1]			
Liver	Bile Duct	Hyperplasia	Moderate
		Hyperplasia	Mild
[Hyperplasia TGLS = 6-2]		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 7-4			
Pituitary Gland		Leukemia Mononuclear	
Seminal Vesicle		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-13,4-14			
Stomach	Glandular	Leukemia Mononuclear	
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			
Thymus		Leukemia Mononuclear	
Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 297

TRT#: 11

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 39 STOP

DISP: Dead

HISTO: 860537

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large - Rectum	Intestine Small - Duodenum
Islets, Pancreatic	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Nose	Pancreas	Parathyroid Gland	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Ileum	Intestine Small - Jejunum
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OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Fibrosarcoma	
		Thrombosis	Marked
Kidney	Renal Tubule	Adenoma	
		Nephropathy	Marked
Liver	Bile Duct	Hyperplasia	Minimal
Lung	Alveolar Epith	Hyperplasia	Minimal
Preputial Gland		Adenoma	
		Hemorrhage	Mild
Note: [HEMORRHAGE] TGLs = 2-13			
Note: [ADENOMA] TGLs = 1-13			
Stomach	Forestomach	Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 298

TRT#: 11

SEX: Male

DAY ON TEST: 680

DOSE: 100MG/KG 39 STOP

DISP: Moribund

HISTO: 860538

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Preputial Gland
Skin
Thymus

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Prostate
Spleen
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Salivary Glands
Stomach - Forestomach
Trachea

Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Adrenal Gland
Heart
Kidney
 Note: [NEPHROPATHY] TGLs = 3-13,2-1
Liver
Parathyroid Gland
Testes
 Note: [ADENOMA] TGLs = 4-5

Medulla

Bile Duct

Interstit Cell

Pheochromocytoma Benign
Cardiomyopathy
Nephropathy

Hyperplasia
Hyperplasia
Adenoma

Mild
Marked

Moderate
Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 299

TRT#: 11

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860539

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Congestion	Mild
Note: [CONGESTION] TGLs = 2-4			
Preputial Gland		Carcinoma	
Note: [CARCINOMA] TGLs = 1-5			
Prostate		Hyperplasia	Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 300

TRT#: 11

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 39 STOP

DISP: Terminal Sacrifice

HISTO: 860540

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver	Bile Duct	Hyperplasia	Minimal
Pancreas		Hyperplasia	Mild
Parathyroid Gland		Hyperplasia	Mild
Stomach	Forestomach	Inflammation	Chronic, Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 301	TRT#: 12	SEX: Male	DAY ON TEST: 337
	DOSE: 0 MG/KG 65 KILL	DISP: Gavage Death	HISTO: 860541

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Testes	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Fatty Change	Minimal
Lymph Node	Mandibular	Edema	Moderate
Pituitary Gland	Pars Distalis	Adenoma	

Note: [ADENOMA] TGLs = 3-4

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 302

TRT#: 12

SEX: Male

DAY ON TEST: 453

DOSE: 0 MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860542

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 2-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 303

TRT#: 12

SEX: Male

DAY ON TEST: 338

DOSE: 0 MG/KG 65 KILL

DISP: Gavage Death

HISTO: 2860543

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Rectum
Nose
Prostate
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Epididymis
Lymph Node - Mandibular
Parathyroid Gland
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Lymph Node - Mesenteric
Pituitary Gland
Seminal Vesicle
Thymus

Bone Marrow
Intestine Large - Colon
Mammary Gland
Preputial Gland
Spleen
Thyroid Gland

AUTO PRECLUDES DIAG.

Intestine Large - Cecum
Islets, Pancreatic

Intestine Small - Duodenum
Pancreas

Intestine Small - Ileum

Intestine Small - Jejunum

OBSERVATIONS

Heart
Kidney
Liver
Lung
 Note: [EDEMA] TGLs = 1-3
Skin
Testes

Bile Duct

Interstit Cell

Cardiomyopathy
Nephropathy
Hyperplasia
Edema

Cyst Epithelial Inclusion
Hyperplasia

Mild
Minimal
Minimal
Mild

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 304

TRT#: 12

SEX: Male

DAY ON TEST: 455

DOSE: 0 MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860544

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Hypertrophy	Moderate
Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 305

TRT#: 12

SEX: Male

DAY ON TEST: 456

DOSE: 0 MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860545

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart	Cardiomyopathy	Mild
Kidney	Nephropathy	Minimal
Liver	Basophilic Focus	
	Inflammation	Chronic, Minimal
Preputial Gland	Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-5,2-5		
Spleen	Ectopic Tissue	Moderate
Testes	Interstitial Cell Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 306

TRT#: 12

SEX: Male

DAY ON TEST: 455

DOSE: 0 MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860546

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
Mesentery	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 1-13			
Testes	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 307

TRT#: 12

SEX: Male

DAY ON TEST: 71

DOSE: 0 MG/KG 65 KILL

DISP: Gavage Death

HISTO: 860547

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Epididymis
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Thymus

Adrenal Gland - Medulla
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Thyroid Gland

Bone
Heart
Intestine Small - Duodenum
Kidney
Mammary Gland
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Trachea

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Liver
Nose
Preputial Gland
Skin
Testes
Urinary Bladder

AUTO PRECLUDES DIAG.

Brain

OBSERVATIONS

Lung

Edema

Mild

Note: [EDEMA] TGLs = 1-3

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 308

TRT#: 12

SEX: Male

DAY ON TEST: 455

DOSE: 0 MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860548

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Testes	Interstit Cell	Adenoma	

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 309

TRT#: 12

SEX: Male

DAY ON TEST: 453

DOSE: 0 MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860549

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Salivary Glands
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Epididymis
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Seminal Vesicle
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Preputial Gland
Skin
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Prostate
Spleen
Thyroid Gland

OBSERVATIONS

Heart
Kidney
Liver
Mesentery
 Note: [NECROSIS] TGLs = 1-14
Testes
 Note: [ADENOMA] TGLs = 3-5
 Note: [ADENOMA] TGLs = 2-5

Bile Duct
Fat

Interstitial Cell

Cardiomyopathy
Nephropathy
Hyperplasia
Necrosis

Adenoma

Mild
Mild
Minimal
Coagulative, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 310

TRT#: 12

SEX: Male

DAY ON TEST: 455

DOSE: 0 MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860550

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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	

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal
Testes	Interstit Cell	Adenoma	

Note: [ADENOMA] TGLs = 2-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 311

TRT#: 13

SEX: Male

DAY ON TEST: 455

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860551

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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	

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Fatty Change	Mild
		Hyperplasia	Mild
Note: [FATTY CHANGE] TGLs = 3-2			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 312

TRT#: 13

SEX: Male

DAY ON TEST: 455

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860552

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Note: [FATTY CHANGE] TGLs = 2-2			
Pancreas		Inflammation	Chronic, Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 313

TRT#: 13

SEX: Male

DAY ON TEST: 453

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860553

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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	

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Mild
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Mild
Testes	Interstitial Cell	Adenoma	

Note: [ADENOMA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 314

TRT#: 13

SEX: Male

DAY ON TEST: 453

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860554

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	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 - Mandibular

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Mild
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Mild
Note: [FATTY CHANGE] TGLs = 1-2			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 315

TRT#: 13

SEX: Male

DAY ON TEST: 456

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860555

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Note: [HYPERPLASIA] TGLs = 1-2			
Pituitary Gland	Pars Distalis	Adenoma	
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 316

TRT#: 13

SEX: Male

DAY ON TEST: 456

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860556

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	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	

OBSERVATIONS

Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
Note: [FATTY CHANGE] TGLs = 3-2			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 317

TRT#: 13

SEX: Male

DAY ON TEST: 456

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860557

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Mild
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 1-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 318

TRT#: 13

SEX: Male

DAY ON TEST: 455

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860558

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 3-1			
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Mild
	Bile Duct	Hyperplasia	Mild
Note: [FATTY CHANGE] TGLs = 4-2			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			
Note: [ADENOMA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 319

TRT#: 13

SEX: Male

DAY ON TEST: 453

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860559

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Hydronephrosis	Moderate
		Nephropathy	Moderate
Note: [HYDRONEPHROSIS] TGLs = 4-1			
Liver	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Hyperplasia	Mild
Nose		Inflammation	Suppurative, Moderate
Note: NARES. FUNGAL INFECTION ASPERGILLIOSIS			
Testes	Interstitial Cell	Adenoma	
		Atrophy	Moderate
Note: [ATROPHY] TGLs = 3-5			
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 320

TRT#: 13

SEX: Male

DAY ON TEST: 455

DOSE: 100MG/KG 65 KILL

DISP: Interval Sacrifice

HISTO: 860560

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Mild
		Fatty Change	Moderate
	Bile Duct	Hyperplasia	Mild
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 321	TRT#: 14	SEX: Male	DAY ON TEST: 565
	DOSE: 100MG/KG 65 STOP	DISP: Moribund	HISTO: 860561

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
	Renal Tubule	Oncocytoma Benign	
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Parathyroid Gland		Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Spleen		Fibrosis	Moderate
Note: [FIBROSIS] TGLs = 2-2			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 5-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 322

TRT#: 14

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 65 STOP

DISP: Terminal Sacrifice

HISTO: 860562

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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	Mammary Gland
Nose	Pancreas	Pituitary Gland	Prostate
Salivary Glands	Skin	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
	Medulla	Pheochromocytoma Benign	
Brain	Cerebrum	Infarct	Moderate
		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 6-3			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-4			
Note: [LEUKEMIA MONUC] TGLs = 4-9			
Parathyroid Gland		Hyperplasia	Mild
Preputial Gland		Inflammation	Suppurative, Mild
Seminal Vesicle		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 322

TRT#: 14

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 65 STOP

DISP: Terminal Sacrifice

HISTO: 860562

ORGAN AND ACCOUNTABLE SITE STATUS

Thymus

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 323

TRT#: 14

SEX: Male

DAY ON TEST: 639

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860563

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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	Mammary Gland
Nose	Pancreas	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Stomach - Forestomach	Thymus	Thyroid Gland	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 7-7			
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 4-1			
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [HYPERPLASIA] TGLs = 6-2			
Note: [LEUKEMIA MONUC] TGLs = 5-2			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-2			
Stomach	Glandular	Mineralization	Moderate
Testes	Interstit Cell	Adenoma	
		Infarct	Marked
Note: [INFARCT] TGLs = 1-13			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 323

TRT#: 14

SEX: Male

DAY ON TEST: 639

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860563

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ADENOMA] TGLs = 1-5
Trachea

Metaplasia

Squamous, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 324

TRT#: 14

SEX: Male

DAY ON TEST: 40

DOSE: 100MG/KG 65 STOP

DISP: Gavage Death

HISTO: 860564

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Mammary Gland

OBSERVATIONS

Kidney	Nephropathy	Minimal
Lung	Foreign Body	Minimal

Note: [FOREIGN BODY] TGLs = 1-3

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 325

TRT#: 14

SEX: Male

DAY ON TEST: 566

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860565

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Parathyroid Gland	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Brain	Cerebellum	Hemorrhage	Moderate
	Cerebrum	Hemorrhage	Moderate
		Squamous Cell Carcinoma	Metastatic (Uncertain Primary Site)
Note: SQ. CELL CARCINOMA EXTENDS INTO INNER EAR-SLIDE #6.			
Note: [HEMORRHAGE] TGLs = 6-7			
Eye	Postr Chamber	Hemorrhage	Moderate
Note: [HEMORRHAGE] TGLs = 2-13			
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver	Bile Duct	Hyperplasia	Minimal
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Mild
Note: [HYPERPLASIA] TGLs = 4-4			
Nose		Inflammation	Suppurative, Mild
Preputial Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 9-8			
Stomach	Forestomach	Ulcer	Marked
[Ulcer TGLS = 8-6]			
Testes	Interstit Cell	Adenoma	
[Adenoma TGLS = 7-5]			
Zymbal's Gland		Squamous Cell Carcinoma	
Note: [SQUAM CEL CARC] TGLs = 5-15			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 325

TRT#: 14

SEX: Male

DAY ON TEST: 566

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860565

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 326

TRT#: 14

SEX: Male

DAY ON TEST: 726

DOSE: 100MG/KG 65 STOP

DISP: Dead

HISTO: 860566

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Islets, Pancreatic	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Pancreas	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Blood Vessel Note: [MINERALIZATION] TGLs = 5-14	Aorta	Mineralization	Mild
Heart		Cardiomyopathy	Moderate
Intestine Small Note: [NECROSIS] TGLs = 11-15	Jejunum	Necrosis	Coagulative, Mild
Kidney [Nephropathy TGLS = 2-1,3-1,4-1]		Nephropathy	Marked
Liver	Bile Duct	Hyperplasia Necrosis	Minimal Coagulative, Minimal
Lung Note: [HEMORRHAGE] TGLs = 6-12		Hemorrhage	Mild
Mesentery Note: [NECROSIS] TGLs = 7-16	Fat	Necrosis	Coagulative, Marked
Nose		Polyp	
Parathyroid Gland		Hyperplasia	Marked
Stomach Note: [HYPERPLASIA] TGLs = 12-6	Forestomach Glandular	Hyperplasia Mineralization	Mild Marked
Testes Note: [ADENOMA] TGLs = 1-5	Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 327

TRT#: 14

SEX: Male

DAY ON TEST: 639

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860567

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Stomach - Forestomach

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney	Renal Tubule	Hyperplasia	Minimal
		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver		Fatty Change	Minimal
Nose		Inflammation	Suppurative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Stomach	Glandular	Ulcer	Moderate
Note: [ULCER] TGLs = 3-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 328

TRT#: 14

SEX: Male

DAY ON TEST: 623

DOSE: 100MG/KG 65 STOP

DISP: Dead

HISTO: 860568

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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 - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 6-1			
Liver	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Marked
		Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 4,8-13			
Note: [NECROSIS] TGLs = 5-2			
Lung	Alveolar Epith	Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 1-14			
Pancreas		Atrophy	Moderate
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 2-9			
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 7-15			
Testes		Atrophy	Moderate
Note: [ATROPHY] TGLs = 3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 329

TRT#: 14

SEX: Male

DAY ON TEST: 729

DOSE: 100MG/KG 65 STOP

DISP: Terminal Sacrifice

HISTO: 860569

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney	Renal Tubule	Adenoma	
	Renal Tubule	Hyperplasia	Minimal
		Nephropathy	Marked
[Nephropathy TGLS = 3-1]			
Liver		Fatty Change	Minimal
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
Note: [FATTY CHANGE] TGLs = 5-2,6-2			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 4-13			
Prostate		Hyperplasia	Mild
Stomach	Forestomach	Ulcer	Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5,2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 330

TRT#: 14

SEX: Male

DAY ON TEST: 609

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860570

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Pancreas	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Mammary Gland

OBSERVATIONS

Ear		Basal Cell Adenoma	
Note: [BASAL CEL ADEN] TGLs = 2-14			
Kidney		Nephropathy	Moderate
Liver		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
Nose		Fungus	Moderate
		Inflammation	Suppurative, Moderate
		Metaplasia	Squamous, Mild
Note: FUNGUS IS ASPERGILLUS.			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 5-4			
Skin		Cyst Epithelial Inclusion	Moderate
Note: [CYST EPITH INC] TGLs = 1-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 4-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:33

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 331

TRT#: 14

SEX: Male

DAY ON TEST: 618

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860571

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 6-1			
Liver	Bile Duct	Fibrosis	Minimal
		Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
		Inflammation	Suppurative, Mild
Lung			
Note: [INFLAMMATION] TGLs = 3-3			
Mesentery	Fat	Inflammation	Suppurative, Marked
Nose		Necrosis	Coagulative, Mild
Parathyroid Gland		Hyperplasia	Moderate
Spleen		Necrosis	Moderate
Note: [NECROSIS] TGLs = 7-2			
Stomach	Forestomach	Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 4-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

Animal Note: PERITONITIS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 332

TRT#: 14

SEX: Male

DAY ON TEST: 593

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860572

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney	Cortex	Cyst	Moderate
	Renal Tubule	Hyperplasia	Minimal
		Nephropathy	Marked
	Renal Tubule	Oncocytoma Benign	
Note: [CYST] TGLs = 3-1			
Note: [NEPHROPATHY] TGLs = 2-1			
Liver	Bile Duct	Hyperplasia	Minimal
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 4-9			
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland		Dilatation	Moderate
Note: [DILATATION] TGLs = 6-14			
Stomach	Forestomach	Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 5-15			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 333

TRT#: 14

SEX: Male

DAY ON TEST: 496

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860573

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Glandular
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Parathyroid Gland	Thymus
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney	Renal Tubule	Adenoma	
		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Liver	Periductular	Fibrosis	Mild
	Bile Duct	Hyperplasia	Minimal
Stomach	Forestomach	Inflammation	Chronic, Moderate
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 334

TRT#: 14

SEX: Male

DAY ON TEST: 499

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860574

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Brain	Epididymis	Esophagus
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	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 7-4			
Note: [LEUKEMIA MONUC] TGLs = 7-4			
Bone Marrow		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Nephropathy	Moderate
Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 6-2			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-4			
Note: [LEUKEMIA MONUC] TGLs = 5-14			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-13			
Testes	Interstitial Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5,3-5			
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 335	TRT#: 14	SEX: Male	DAY ON TEST: 618
	DOSE: 100MG/KG 65 STOP	DISP: Moribund	HISTO: 860575

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Liver		Hepatocellular Adenoma	
Note: [HEPATOCLR ADEN] TGLs = 7-2,6-2			
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 2-13			
Nose		Fungus	Moderate
Note: FUNGUS IS PROBABLY ASPERGILLUS.			
Pancreas		Atrophy	Mild
Parathyroid Gland		Hyperplasia	Moderate
Note: [HYPERPLASIA] TGLs = 1-9			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 4-6			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 336	TRT#: 14	SEX: Male	DAY ON TEST: 70
	DOSE: 100MG/KG 65 STOP	DISP: Gavage Death	HISTO: 860576

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Liver
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Pancreas
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Testes	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Mammary Gland

OBSERVATIONS

Kidney	Nephropathy	Minimal
Lung	Foreign Body	Minimal

Note: [FOREIGN BODY] TGLs = 1-3

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 337

TRT#: 14

SEX: Male

DAY ON TEST: 585

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860577

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Pancreas	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-7			
Heart		Leukemia Mononuclear	
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1			
Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
		Leukemia Mononuclear	
Spleen			
Note: [LEUKEMIA MONUC] TGLs = 1-2			
Stomach	Forestomach	Inflammation	Chronic, Mild
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 6-6			
Note: [INFLAMMATION] TGLs = 5-13			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:33
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 338

TRT#: 14

SEX: Male

DAY ON TEST: 588

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860578

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - 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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach - Forestomach
Thymus	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 3-1.3-13			
Liver	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Stomach	Glandular	Dilatation	Mild
Note: GLANDULAR STOMACH-DILATATION OF GASTRIC GLANDULAR LUMEN.			
Testes	Interstit Cell	Adenoma	
Note: [ADENOMA] TGLs = 2-5			
Thyroid Gland	Follicular Cel	Carcinoma	
Note: [CARCINOMA] TGLs = 1-9			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 339

TRT#: 14

SEX: Male

DAY ON TEST: 40

DOSE: 100MG/KG 65 STOP

DISP: Gavage Death

HISTO: 860579

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Skin
Testes
Urinary Bladder

Adrenal Gland - Medulla
Epididymis
Intestine Small - Duodenum
Liver
Nose
Preputial Gland
Spleen
Thymus

Bone
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Salivary Glands
Stomach - Forestomach
Thyroid Gland

Bone Marrow
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Seminal Vesicle
Stomach - Glandular
Trachea

MISSING

Esophagus

OBSERVATIONS

Heart
Kidney
Lung
Note: [FOREIGN BODY] TGLs = 1-3
Prostate

Cardiomyopathy
Nephropathy
Foreign Body
Inflammation

Minimal
Minimal
Minimal
Chronic, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 340

TRT#: 14

SEX: Male

DAY ON TEST: 253

DOSE: 100MG/KG 65 STOP

DISP: Moribund

HISTO: 860580

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Epididymis
Intestine Large - Colon
Islets, Pancreatic
Nose
Preputial Gland
Spleen
Thymus

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Lung
Pancreas
Salivary Glands
Stomach - Forestomach
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Ileum
Lymph Node - Mandibular
Parathyroid Gland
Seminal Vesicle
Stomach - Glandular
Trachea

Brain
Intestine Large - Cecum
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pituitary Gland
Skin
Testes

MISSING

Mammary Gland

OBSERVATIONS

Bone
Note: [SARCOMA] TGLs = 7-9

Lumbar, Vertebra

Sarcoma

Intestine Large
Kidney
Liver

Rectum

Inflammation
Nephropathy
Degeneration
Fatty Change
Hemorrhage

Suppurative, Moderate
Mild
Granular, Minimal
Minimal
Moderate

Prostate
Note: [HEMORRHAGE] TGLs = 6-5

Back

Sarcoma

Skeletal Muscle
Spinal Cord
Urinary Bladder
Note: [HEMORRHAGE] TGLs = 4-5,4-5

Meninges
Lumen

Sarcoma
Hemorrhage

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 1	TRT#: 2	SEX: Female	DAY ON TEST: 732
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860061

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	Bone	Bone Marrow	Clitoral Gland
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Gland	Cortex	Adenoma	
Brain	Hypothalamus	Developmental Malformation	
Note: [DEVELOP MALFOR] TGLs = 5-7			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
		Galactocele	
Note: [GALACTOCELE] TGLs = 3-14			
Note: [FIBROADENOMA] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Uterus		Polyp	
Note: [POLYP] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 2	TRT#: 2	SEX: Female	DAY ON TEST: 580
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860062

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Adrenal Gland	Cortex	Hyperplasia	Mild
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 3	TRT#: 2	SEX: Female	DAY ON TEST: 662
	DOSE: VEHICLE CONTROL	DISP: Dead	HISTO: 860063

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Intestine Large - Colon	Intestine Large - Rectum
Islets, Pancreatic	Kidney	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Ovary	Pancreas
Parathyroid Gland	Pituitary Gland	Salivary Glands	Skin
Stomach - Forestomach	Thymus	Thyroid Gland	Tissue NOS
Trachea	Urinary Bladder	Uterus	

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
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OBSERVATIONS

Clitoral Gland	Duct	Dilatation	Moderate
Heart		Mineralization	Mild
Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Suppurative, Marked
Nose		Inflammation	Suppurative, Moderate
Spleen		Mesothelioma Nos	
Stomach	Glandular	Mineralization	Marked
	Glandular	Ulcer	Moderate
Note: [ULCER] TGLs = 2-6			
Tongue		Hyperplasia	Moderate
		Inflammation	Suppurative, Mild

Note: TISSUE NO TUMOR FOUND.

Note: TONGUE-MARKED HYPERPLASIA OF NORMAL SALIVARY

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 4	TRT#: 2	SEX: Female	DAY ON TEST: 733
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860064

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-13			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Nose		Fungus	Moderate
Note: FUNGUS IS ASPERGILLUS.			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Thyroid Gland	C Cell	Hyperplasia	Marked
Note: [HYPERPLASIA] TGLs = 2-9			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 5	TRT#: 2	SEX: Female	DAY ON TEST: 719
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860065

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	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	Kidney	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Gland Note: [ATROPHY] TGLs = 2-4	Cortex	Atrophy	Moderate
Islets, Pancreatic		Adenoma	
Liver	Bile Duct	Basophilic Focus	Mild
[Necrosis TGLS = 4-2]		Hyperplasia	Coagulative, Mild
		Necrosis	
Pituitary Gland Note: [ADENOMA] TGLs = 3-4	Pars Distalis	Adenoma	
Uterus Note: [POLYP] TGLs = 1-5		Polyp	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 6	TRT#: 2	SEX: Female	DAY ON TEST: 455
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860066

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Liver
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Nose	Ovary	Pancreas	Parathyroid Gland
Pituitary Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Uterus		

MISSING

Urinary Bladder

OBSERVATIONS

Heart	Cardiomyopathy	Minimal
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PRIMARY CAUSE OF DEATH

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 7	TRT#: 2	SEX: Female	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860067

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular
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

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Lung		Inflammation	Minimal
Pituitary Gland	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 8	TRT#: 2	SEX: Female	DAY ON TEST: 92
	DOSE: VEHICLE CONTROL	DISP: Gavage Death	HISTO: 860068

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	Bone	Bone Marrow	Brain
Clitoral Gland	Esophagus	Heart	Islets, Pancreatic
Kidney	Liver	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Ovary	Pancreas
Parathyroid Gland	Pituitary Gland	Salivary Glands	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Stomach	

OBSERVATIONS

Adrenal Gland	Cortex	Hemorrhage	Mild
Liver			
Note: NORMAL PARENCHYMA			
Lung		Edema	Mild
Note: [EDEMA] TGLs = 2-3			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 9

TRT#: 2

SEX: Female

DAY ON TEST: 734

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860069

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
Pituitary Gland	Pars Distalis	Cyst	Mild
Uterus		Polyp	

Note: [POLYP] TGLs = 1-5

PRIMARY CAUSE OF DEATH

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* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 10	TRT#: 2	SEX: Female	DAY ON TEST: 733
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860070

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Lung
Lymph Node - Mandibular	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			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Liver		Basophilic Focus	
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Cyst	Moderate
Note: [CYST] TGLs = 2-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 11	TRT#: 2 DOSE: VEHICLE CONTROL	SEX: Female DISP: Moribund	DAY ON TEST: 712 HISTO: 860071
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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
Lung	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Liver	Bile Duct	Hyperplasia Leukemia Mononuclear	Moderate
[Hyperplasia TGLS = 10-2]			
Lymph Node	Pancreatic Mandibular	Inflammation Leukemia Mononuclear	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 8-15			
Note: [LEUKEMIA MONUC] TGLs = 1-9			
Mammary Gland		Inflammation	Marked
Note: [INFLAMMATION] TGLs = 3-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 6-4			
Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-2]			
Stomach	Forestomach Glandular	Ulcer Ulcer	Moderate Moderate
Note: [ULCER] TGLs = 9-16			
[Ulcer TGLS = 11-16]			
Tissue NOS		Fibroma	
Note: [FIBROMA] TGLs = 4-17			
Uterus	Cervix	Inflammation	Suppurative, Mild
Note: [INFLAMMATION] TGLs = 5-13			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 12	TRT#: 2	SEX: Female	DAY ON TEST: 732
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860072

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 13	TRT#: 2	SEX: Female	DAY ON TEST: 456
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860073

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland
Nose	Ovary	Pancreas	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Parathyroid Gland	Pituitary Gland
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OBSERVATIONS

Kidney	Nephropathy	Minimal
Uterus	Hydrometra	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 14	TRT#: 2	SEX: Female	DAY ON TEST: 491
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860074

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
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 - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Pituitary Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

MISSING

Clitoral Gland

OBSERVATIONS

Bone Marrow	Inflammation	Chronic, Mild
Kidney	Nephropathy	Minimal
Liver	Basophilic Focus	
	Developmental Malformation	
Note: [DEVELOP MALFOR] TGLs = 2-2		
Mammary Gland	Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13		
Thyroid Gland	C Cell	Hyperplasia
		Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 15

TRT#: 2

SEX: Female

DAY ON TEST: 708

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860075

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Thrombosis	Moderate
Note: [THROMBUS] TGLs = 5-13			
Kidney		Nephropathy	Mild
Liver		Fatty Change	Moderate
		Necrosis	Coagulative, Minimal
Note: [FATTY CHANGE] TGLs = 2-2			
Lymph Node	Mesenteric	Hyperplasia	Lymphoid, Moderate
Mammary Gland		Galactocele	Moderate
Note: [GALACTOCELE] TGLs = 4-8			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Stomach	Glandular	Ulcer	Moderate
Uterus		Hydrometra	Mild
		Necrosis	Coagulative, Moderate
Note: [HYDROMETRA] TGLs = 6-5			
[Hydrometra TGLS = 6-14]			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 16

TRT#: 2

SEX: Female

DAY ON TEST: 624

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860076

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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	Pituitary Gland
Salivary Glands	Skin	Stomach - Forestomach	Stomach - Glandular
Thyroid Gland	Trachea	Uterus	

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-2			
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-14			
Note: [LEUKEMIA MONUC] TGLs = 4-4			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-13			
Thymus		Leukemia Mononuclear	
Urinary Bladder		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 17	TRT#: 2	SEX: Female	DAY ON TEST: 435
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860077

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Developmental Malformation	
	Bile Duct	Hyperplasia	Minimal
Note: [DEVELOP MALFOR] TGLs = 1-2			
Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 2-4]			
Uterus		Hydrometra	Moderate
[Hydrometra TGLS = 3-5]			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 18	TRT#: 2	SEX: Female	DAY ON TEST: 732
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860078

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
Ovary	Corpus Luteum	Cyst	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Uterus		Hydrometra	Moderate
Note: [HYDROMETRA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 19	TRT#: 2	SEX: Female	DAY ON TEST: 184
	DOSE: VEHICLE CONTROL	DISP: Gavage Death	HISTO: 860079

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Heart	Nose
Ovary	Parathyroid Gland	Salivary Glands	Skin
Trachea	Urinary Bladder	Uterus	

MISSING

Clitoral Gland	Mammary Gland
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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
Lymph Node - Mandibular	Lymph Node - Mesenteric	Pancreas	Pituitary Gland
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland			

OBSERVATIONS

Liver	Developmental Malformation	
Lung	Hemorrhage	Minimal
Note: [HEMORRHAGE] TGLs = 3-3		

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 20	TRT#: 2	SEX: Female	DAY ON TEST: 356
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860080

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-12			
Liver		Basophilic Focus	
		Hematopoietic Cell Proliferation	Mild
Pituitary Gland	Pars Intermed	Congestion	Minimal
Note: [CONGESTION] TGLs = 4-4			
Spleen		Hematopoietic Cell Proliferation	Moderate
Note: [HEMA CELL PROL] TGLs = 2-2			
Uterus		Hydrometra	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 21 **TRT#:** 2 **SEX:** Female **DAY ON TEST:** 733
DOSE: VEHICLE CONTROL **DISP:** Terminal Sacrifice **HISTO:** 860081

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Parathyroid Gland
Pituitary Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Developmental Malformation	
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
Note: [DEVELOP MALFOR] TGLs = 3-14			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pancreas	Acinus	Atrophy	Minimal
Uterus		Hydrometra	Marked
Note: [HYDROMETRA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 22	TRT#: 2	SEX: Female	DAY ON TEST: 729
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860082

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Clitoral Gland	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lung	Lymph Node - Mandibular	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	

OBSERVATIONS

Brain	Cerebrum	Atypia Cellular	Marked
	Cerebrum	Mineralization	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Adenoma	

Note: [ADENOMA] TGLs = 1-13

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 23	TRT#: 2	SEX: Female	DAY ON TEST: 665
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860083

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
Mammary Gland		Galactocele	Marked
Note: [GALACTOCELE] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Thyroid Gland	C Cell	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 24	TRT#: 2	SEX: Female	DAY ON TEST: 455
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860084

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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			

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Uterus		Polyp	

Note: [POLYP] TGLs = 1-5

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 25	TRT#: 2	SEX: Female	DAY ON TEST: 732
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860085

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - 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
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Gland	Medulla	Basophilic Focus	Mild
Clitoral Gland		Inflammation	Suppurative, Moderate
Kidney		Mineralization	Minimal
		Nephropathy	Minimal
Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
Note: [INFLAMMATION] TGLs = 3-13,3-2			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 26	TRT#: 2	SEX: Female	DAY ON TEST: 734
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860086

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Heart		Fibrosis	Mild
Liver		Basophilic Focus	
		Fatty Change	Minimal
Note: [FATTY CHANGE] TGLs = 1-2,4-2			
Lung	Alveolar Epith	Hyperplasia	Mild
Note: [HYPERPLASIA] TGLs = 3-13			
Mammary Gland		Galactocele	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 27	TRT#: 2	SEX: Female	DAY ON TEST: 732
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860087

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Lymph Node - Mesenteric

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Mammary Gland		Galactocele	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			
Uterus		Hyperplasia	Cystic, Mild
Note: [HYPERPLASIA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 28	TRT#: 2	SEX: Female	DAY ON TEST: 607
	DOSE: VEHICLE CONTROL	DISP: Dead	HISTO: 860088

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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 - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Note: [PHEOCHROM BGN] TGLs = 1,3-13			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			
Thyroid Gland	Follicular Cel	Carcinoma	

PRIMARY CAUSE OF DEATH

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 29 TRT#: 2 SEX: Female DAY ON TEST: 554
DOSE: VEHICLE CONTROL DISP: Dead HISTO: 860089

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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
Mammary Gland	Nose	Ovary	Parathyroid Gland
Pituitary Gland	Salivary Glands	Skin	Stomach - Forestomach
Stomach - Glandular	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC]			
TGLs = 8-2			
Lung		Leukemia Mononuclear	
Lymph Node	Lumbar	Leukemia Mononuclear	
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC]			
TGLs = 9-15			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS]			
TGLs = 4-14			
Pancreas		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC]			
TGLs = 5-13,6-13,7-13			
Thymus		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC]			
TGLs = 3-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 30

TRT#: 2

SEX: Female

DAY ON TEST: 734

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860090

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Blood	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Parathyroid Gland	Salivary Glands	Skin	Stomach - Forestomach
Stomach - Glandular	Thymus	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Adrenal Gland	Medulla	Basophilic Focus	Mild
Heart		Cardiomyopathy	Mild
		Thrombosis	Marked
Kidney		Nephropathy	Minimal
Liver		Fatty Change	Moderate
	Bile Duct	Hyperplasia	Minimal
Note: [FATTY CHANGE] TGLs = 2-2			
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Cyst	Mild
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-2			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 31	TRT#: 2	SEX: Female	DAY ON TEST: 732
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860091

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Note: [CARDIOMYOPATHY] TGLs = 5-13.1			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-14			
Note: [FIBROADENOMA] TGLs = 2-15			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Uterus		Hydrometra	Moderate
Vagina		Cyst	Moderate
Note: [CYST] TGLs = 4-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 32	TRT#: 2	SEX: Female	DAY ON TEST: 456
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860092

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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		

OBSERVATIONS

Kidney	Nephropathy	Minimal
Liver	Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 33	TRT#: 2	SEX: Female	DAY ON TEST: 732
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860093

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
Mammary Gland		Fibroadenoma	
		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Note: [FIBROADENOMA] TGLs = 2-14			
Pituitary Gland	Pars Distalis	Adenoma	
Uterus		Hyperplasia	Cystic, Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 34	TRT#: 2	SEX: Female	DAY ON TEST: 734
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860094

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Lung
Lymph Node - Mandibular	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		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild

Note: [INFLAMMATION] TGLs = 1-2

PRIMARY CAUSE OF DEATH

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 35	TRT#: 2	SEX: Female	DAY ON TEST: 700
	DOSE: VEHICLE CONTROL	DISP: Dead	HISTO: 860095

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Mild
Heart		Cardiomyopathy	Mild
Kidney		Mineralization	Moderate
Liver		Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 5-2			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 3-13,4-13			
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenocarcinoma	
	Pars Distalis	Pigmentation	Melanin, Moderate
Note: [ADENOCARC] TGLs = 1-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 36	TRT#: 2	SEX: Female	DAY ON TEST: 733
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860096

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Fibrosis	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
		Mixed Cell Focus	
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 2-13			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Uterus		Polyp	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 37	TRT#: 2	SEX: Female	DAY ON TEST: 733
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860097

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Clitoral Gland Note: [DILATATION] TGLs = 1-5	Duct	Dilatation	Marked
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Basophilic Focus Hyperplasia Mixed Cell Focus	Minimal
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland Note: [ADENOMA] TGLs = 4-4	Pars Distalis	Adenoma	
Uterus Note: [POLYP] TGLs = 2-14		Polyp	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 38	TRT#: 2	SEX: Female	DAY ON TEST: 456
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860098

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Lung
Lymph Node - Mandibular	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			

OBSERVATIONS

Heart	Cardiomyopathy	Minimal
Liver	Inflammation	Chronic, Minimal
Uterus	Hydrometra	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 39

TRT#: 2

SEX: Female

DAY ON TEST: 714

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860099

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Moderate
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Fatty Change	Mild
Note: [FATTY CHANGE] TGLs = 4-13			
Lung		Edema	Moderate
Note: [EDEMA] TGLs = 2-12			
Nose		Inflammation	Suppurative, Moderate
Ovary	Follicle	Cyst	
Note: [CYST] TGLs = 1-5			
Pituitary Gland	Pars Distalis	Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 40

TRT#: 2

SEX: Female

DAY ON TEST: 693

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860100

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mesenteric
Pancreas
Stomach - Forestomach
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Mammary Gland
Parathyroid Gland
Stomach - Glandular
Uterus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Nose
Salivary Glands
Thymus

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Ovary
Spleen
Trachea

OBSERVATIONS

Kidney
Liver
Lymph Node
 Note: [HYPERPLASIA] TGLs = 2-9
Pituitary Gland
 [Adenoma TGLS = 1-4]
Skin
 Note: [SQUAM CEL CARC] TGLs = 3-13
Thyroid Gland

Mandibular

Pars Distalis

C Cell

Nephropathy
Basophilic Focus
Hyperplasia

Adenoma

Squamous Cell Carcinoma

Hyperplasia

Minimal

Lymphoid, Mild

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 41	TRT#: 2	SEX: Female	DAY ON TEST: 733
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860101

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Parathyroid Gland
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 1-14			
Ovary	Corpus Luteum	Cyst	Mild
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Salivary Glands		Inflammation	Chronic, Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 42	TRT#: 2	SEX: Female	DAY ON TEST: 734
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860102

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Cyst	
Pituitary Gland	Pars Distalis		
Note: [CYST] TGLs = 1-4			
Stomach	Forestomach	Developmental Malformation	
Note: STOMACH LESION IS A FOCAL AREA OF SMOOTH MUSCLE			
Note: [DEVELOP MALFOR] TGLs = 2-13			
Note: HYPERTROPHY WHICH COULD ALSO BE A NECROPSY ARTIFACT.			
Uterus		Hydrometra	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 43

TRT#: 2

SEX: Female

DAY ON TEST: 699

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860103

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
Clitoral Gland	Esophagus	Intestine Large - Cecum	Intestine Small - Duodenum
Islets, Pancreatic	Lung	Lymph Node - Mesenteric	Mammary Gland
Nose	Ovary	Parathyroid Gland	Salivary Glands
Skin	Stomach - Forestomach	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Bone Marrow		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Intestine Large	Colon	Leukemia Mononuclear	
	Rectum	Leukemia Mononuclear	
Intestine Small	Ileum	Leukemia Mononuclear	
	Jejunum	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-6			
Note: [LEUKEMIA MONUC] TGLs = 5-6			
Kidney		Leukemia Mononuclear	
Liver		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-2]			
Lymph Node	Mandibular	Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 4-13			
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 6-4			
Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 2-2]			
Stomach	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 7-6			
Uterus		Polyp	
Note: [POLYP] TGLs = 1-5			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 43

TRT#: 2

SEX: Female

DAY ON TEST: 699

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860103

ORGAN AND ACCOUNTABLE SITE STATUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 44	TRT#: 2	SEX: Female	DAY ON TEST: 455
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860104

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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		

OBSERVATIONS

Kidney	Nephropathy	Minimal
Liver	Basophilic Focus	
	Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 45

TRT#: 2

SEX: Female

DAY ON TEST: 455

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860105

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Bone
Esophagus
Intestine Small - Duodenum
Kidney
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Heart
Liver

Cardiomyopathy
Inflammation

Mild
Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 46

TRT#: 2

SEX: Female

DAY ON TEST: 659

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860106

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Bone Marrow	Clitoral Gland	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic	Mammary Gland
Nose	Ovary	Parathyroid Gland	Skin
Thyroid Gland	Trachea		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Brain	Meninges	Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
Liver		Fatty Change	Moderate
		Leukemia Mononuclear	
Note: [FATTY CHANGE] TGLs = 2-2			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-4			
Pancreas		Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Adenoma	
		Leukemia Mononuclear	
Note: [ADENOMA] TGLs = 3-4			
Salivary Glands		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-13			
Stomach	Forestomach	Inflammation	Chronic, Mild
	Glandular	Leukemia Mononuclear	
Note: [INFLAMMATION] TGLs = 5-6			
Note: [LEUKEMIA MONUC] TGLs = 6-6			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 46

TRT#: 2

SEX: Female

DAY ON TEST: 659

DOSE: VEHICLE CONTROL

DISP: Moribund

HISTO: 860106

ORGAN AND ACCOUNTABLE SITE STATUS

Thymus

Leukemia Mononuclear

Urinary Bladder

Leukemia Mononuclear

Uterus

Hyperplasia

Cystic, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 47

TRT#: 2

SEX: Female

DAY ON TEST: 729

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860107

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Hyperplasia	Glandular, Mild
Mammary Gland			
Note: [HYPERPLASIA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 48

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860108

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Skin
Thymus
Uterus

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Spleen
Thyroid Gland

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	

Note: [ADENOMA] TGLs = 1-4

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 49

TRT#: 2

SEX: Female

DAY ON TEST: 456

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860109

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Kidney
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone
Intestine Large - Cecum
Intestine Small - Ileum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Bone Marrow
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Clitoral Gland
Note: [INFLAMMATION] TGLs = 1-13
Heart
Liver

Inflammation

Suppurative, Marked

Cardiomyopathy

Mild

Basophilic Focus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 50

TRT#: 2

SEX: Female

DAY ON TEST: 455

DOSE: VEHICLE CONTROL

DISP: Interval Sacrifice

HISTO: 860110

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Liver
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone Marrow
Heart
Intestine Small - Duodenum
Kidney
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

PRIMARY CAUSE OF DEATH

-

Animal Note: NO MICRO LESIONS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 51	TRT#: 2	SEX: Female	DAY ON TEST: 732
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860111

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Adrenal Gland Note: [PHEOCHROM BGN] TGLs = 2-4	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver Note: [INFLAMMATION] TGLs = 3-2	Bile Duct	Hyperplasia Inflammation	Minimal Chronic, Moderate
Mammary Gland Note: [ADENOCARC] TGLs = 1-13		Adenocarcinoma	
Pituitary Gland Note: [ADENOMA] TGLs = 4-4	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 52	TRT#: 2	SEX: Female	DAY ON TEST: 734
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860112

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Pancreas	Pituitary Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
Note: HEPATITIS IS NOT LOCALIZED.			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Ovary	Follicle	Cyst	Moderate
Note: [CYST] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 53	TRT#: 2	SEX: Female	DAY ON TEST: 614
	DOSE: VEHICLE CONTROL	DISP: Moribund	HISTO: 860113

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Brain	Cerebrum	Hemorrhage	Moderate
Liver		Basophilic Focus	
		Developmental Malformation	
Note: [DEVELOP MALFOR] TGLs = 2-2			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 54

TRT#: 2

SEX: Female

DAY ON TEST: 732

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860114

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lung
Ovary
Skin
Thymus
Uterus

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Pancreas
Spleen
Thyroid Gland

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Stomach - Forestomach
Trachea

Bone Marrow
Heart
Intestine Small - Duodenum
Kidney
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

MISSING

Lymph Node - Mesenteric

Parathyroid Gland

OBSERVATIONS

Liver

Basophilic Focus
Inflammation

Chronic, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 55 TRT#: 2 SEX: Female DAY ON TEST: 729
DOSE: VEHICLE CONTROL DISP: Terminal Sacrifice HISTO: 860115

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Eye	Lens	Cataract	Marked
	Retina	Degeneration	Marked
Note: [CATARACT] TGLs = 3-14			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Mixed Cell Focus	
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 56	TRT#: 2	SEX: Female	DAY ON TEST: 649
	DOSE: VEHICLE CONTROL	DISP: Dead	HISTO: 860116

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Clitoral Gland	Esophagus	Heart	Intestine Large - Rectum
Intestine Small - Duodenum	Islets, Pancreatic	Kidney	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Small - Ileum	Intestine Small - Jejunum
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OBSERVATIONS

Brain	Hypothalamus	Compression	Moderate
Liver	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
		Galactocele	

Note: [GALACTOCELE] TGLs = 2-8

[Galactocele TGLS = 1-13]

Pituitary Gland	Pars Distalis	Adenoma	
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[Adenoma TGLS = 3-4]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 57

TRT#: 2

SEX: Female

DAY ON TEST: 733

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860117

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Pancreas
Spleen
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Parathyroid Gland
Stomach - Forestomach
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Liver
Nose
Salivary Glands
Stomach - Glandular
Uterus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lung
Ovary
Skin
Thyroid Gland

MISSING

Thymus

OBSERVATIONS

Heart
Kidney
Mammary Gland
 Note: [FIBROADENOMA] TGLs = 1-13
Pituitary Gland
 Note: PITUITARY MASS IS NOT TYPICAL OF ADENOMATOUS LESIONS.
 Note: [ADENOMA] TGLs = 2-4

Cardiomyopathy
Nephropathy
Fibroadenoma

Adenoma

Mild
Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 58	TRT#: 2	SEX: Female	DAY ON TEST: 734
	DOSE: VEHICLE CONTROL	DISP: Terminal Sacrifice	HISTO: 860118

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
Mammary Gland		Fibroadenoma	
		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Note: [FIBROADENOMA] TGLs = 2-14			
Note: [FIBROADENOMA] TGLs = 3-15			
Ovary	Follicle	Cyst	Mild
Note: [CYST] TGLs = 5-5			
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 7-16			
Uterus		Polyp	
Note: [POLYP] TGLs = 4-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 59

TRT#: 2

SEX: Female

DAY ON TEST: 734

DOSE: VEHICLE CONTROL

DISP: Terminal Sacrifice

HISTO: 860119

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Stomach - Forestomach
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Skin
Thymus
Uterus

OBSERVATIONS

Heart
Kidney
Liver

Cardiomyopathy
Nephropathy
Basophilic Focus
Developmental Malformation
Hyperplasia

Mild
Minimal
Minimal

Bile Duct

[Developmental Malformation TGLS = 2-2]

Ovary

Follicle

Cyst

Marked

Note: [CYST] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 60	TRT#: 2	SEX: Female	DAY ON TEST: 456
	DOSE: VEHICLE CONTROL	DISP: Interval Sacrifice	HISTO: 860120

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Lung
Lymph Node - Mandibular	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		

OBSERVATIONS

Heart	Cardiomyopathy	Mild
Liver	Basophilic Focus	
	Inflammation	Chronic, Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 61

TRT#: 4

SEX: Female

DAY ON TEST: 455

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860181

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Inflammation

Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 62	TRT#: 4	SEX: Female	DAY ON TEST: 732
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860182

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Pituitary Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Lymph Node - Mandibular

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
Mammary Gland		Fibroadenoma	
		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Note: [FIBROADENOMA] TGLs = 2-14			
Uterus		Polyp	
Note: [POLYP] TGLs = 4-15			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 63

TRT#: 4

SEX: Female

DAY ON TEST: 733

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860183

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Mammary Gland		Adenoma	
Note: [ADENOMA] TGLs = 1-14			
Pituitary Gland	Pars Distalis	Cyst	Mild
Skin		Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 2-13			
Uterus	Cervix	Cyst	Moderate
		Hydrometra	Moderate
Note: [HYDROMETRA] TGLs = 3-5			
Note: [CYST] TGLs = 4-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 64

TRT#: 4

SEX: Female

DAY ON TEST: 456

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860184

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Bile Duct

Hyperplasia

Minimal

Note: LIVER-HEPATODIAPRAGMATIC MALFORMATION.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 65	TRT#: 4	SEX: Female	DAY ON TEST: 531
	DOSE: 25 MG/KG	DISP: Moribund	HISTO: 860185

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Uterus	

MISSING

Urinary Bladder

OBSERVATIONS

Clitoral Gland	Duct	Dilatation	Moderate
Kidney		Nephropathy	Moderate
Liver		Necrosis	Coagulative, Minimal
Pituitary Gland	Pars Distalis	Cyst	Mild
Note: [CYST] TGLs = 4-4			
Vagina		Inflammation	Suppurative, Marked
		Leiomyoma	
Note: [LEIOMYOMA] TGLs = 1,2-15,1,2-16			
Note: [INFLAMMATION] TGLs = 1-13			

PRIMARY CAUSE OF DEATH -

Animal Note: U. BLADDER MAYBE IN VAGINAL MASS.

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 66 **TRT#:** 4 **SEX:** Female **DAY ON TEST:** 693
DOSE: 25 MG/KG **DISP:** Moribund **HISTO:** 860186

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mesenteric	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 3-13			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Lymph Node	Mandibular	Hyperplasia	Macrophage, Moderate
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-14			
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 6-4			
Skin		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 5-15			
Note: [INFLAMMATION] TGLs = 2-14			
Spleen		Hyperplasia	Lymphoid, Moderate
[Hyperplasia TGLs = 4-2]			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 67

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860187

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Islets, Pancreatic
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Large - Rectum
Lymph Node - Mandibular
Ovary
Skin
Thymus

Bone Marrow
Heart
Intestine Small - Duodenum
Lymph Node - Mesenteric
Pancreas
Spleen
Thyroid Gland

OBSERVATIONS

Intestine Small
Note: [LEIOMYOMA] TGLs = 2-13
Kidney
Liver
Note: [INFLAMMATION] TGLs = 4-2
Lung
Note: [HYPERPLASIA] TGLs = 3-3
Pituitary Gland
Uterus
Note: [HYDROMETRA] TGLs = 1-5

Jejunum
Bile Duct
Alveolar Epith
Pars Distalis

Leiomyoma
Nephropathy
Hyperplasia
Inflammation
Hyperplasia
Adenoma
Hydrometra

Minimal
Minimal
Chronic, Mild
Mild
Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 68	TRT#: 4	SEX: Female	DAY ON TEST: 729
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860188

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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 - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Kidney		Nephropathy	Mild
Liver		Inflammation	Chronic, Minimal
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 69

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860189

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Heart
Intestine Small - Duodenum
Lymph Node - Mandibular
Ovary
Skin
Thymus
Uterus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mesenteric
Pancreas
Spleen
Thyroid Gland

OBSERVATIONS

Clitoral Gland
Kidney
Liver

Lung
Note: [ADENOMA] TGLs = 2-13
Pituitary Gland

Bile Duct

Pars Distalis

Adenoma
Nephropathy
Basophilic Focus
Hyperplasia
Inflammation
Adenoma

Adenoma

Mild

Minimal
Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 70	TRT#: 4	SEX: Female	DAY ON TEST: 732
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860190

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Heart	Intestine Large - Cecum
Intestine Large - Colon	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lung	Lymph Node - Mesenteric	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Stomach - Forestomach	Stomach - Glandular	Thymus
Trachea	Urinary Bladder		

MISSING

Lymph Node - Mandibular

INSUFFICIENT TISSUE

Intestine Large - Rectum

OBSERVATIONS

Clitoral Gland Note: [INFLAMMATION] TGLs = 2-14		Inflammation	Suppurative, Marked
Eye Note: [CATARACT] TGLs = 3-15	Lens	Cataract	Marked
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Fibroadenoma	
Mammary Gland Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Cyst	Moderate
Spleen		Hyperplasia	Lymphoid, Mild
Thyroid Gland	C Cell	Hyperplasia	Mild
Uterus		Hydrometra	Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 71

TRT#: 4

SEX: Female

DAY ON TEST: 659

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860191

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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	Lymph Node - Mandibular	Nose	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Clitoral Gland		Adenoma	
Eye	Lens	Cataract	Moderate
Note: [CATARACT] TGLs = 4-17			
Liver		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Lymph Node	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 3-13			
Ovary		Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Cyst	Mild
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-2			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 72

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860192

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Spleen
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Uterus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Skin
Thymus

OBSERVATIONS

Heart
Kidney
Liver

Ovary
Note: [CYST] TGLs = 1-13
Thyroid Gland

Bile Duct

Follicle

C Cell

Cardiomyopathy
Nephropathy
Basophilic Focus
Hyperplasia
Inflammation
Cyst

Hyperplasia

Mild
Minimal

Minimal
Chronic, Moderate
Marked

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 73	TRT#: 4	SEX: Female	DAY ON TEST: 734
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860193

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mesentery	Nose	Ovary
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 2-13			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Cyst	
Note: [CYST] TGLs = 4-4			
Thyroid Gland	Follicular Cel	Carcinoma	
Note: [CARCINOMA] TGLs = 1-9			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 74	TRT#: 4	SEX: Female	DAY ON TEST: 733
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860194

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

MISSING

Clitoral Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-13			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 75

TRT#: 4

SEX: Female

DAY ON TEST: 733

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860195

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Skin
Thymus
Uterus

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Spleen
Thyroid Gland

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Kidney
Liver

Bile Duct

Nephropathy
Basophilic Focus
Hyperplasia
Inflammation
Fibroadenoma

Minimal
Minimal
Chronic, Minimal

Mammary Gland

Note: [FIBROADENOMA] TGLs = 1-13

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 76

TRT#: 4

SEX: Female

DAY ON TEST: 334

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860196

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Liver
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Kidney
Lung

Nephropathy
Congestion

Minimal
Mild

Note: [CONGESTION] TGLs = 1-2

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 77	TRT#: 4	SEX: Female	DAY ON TEST: 732
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860197

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Brain	Hypothalamus	Compression	Moderate
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Stomach	Forestomach	Squamous Cell Papilloma	
Note: [PAPILOMA SQUA] TGLs = 2-6			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 78	TRT#: 4	SEX: Female	DAY ON TEST: 456
	DOSE: 25 MG/KG	DISP: Interval Sacrifice	HISTO: 860198

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Liver

OBSERVATIONS

Pituitary Gland

Pars Distalis

Adenoma

Note: [ADENOMA] TGLs = 2-4

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 79	TRT#: 4 DOSE: 25 MG/KG	SEX: Female DISP: Interval Sacrifice	DAY ON TEST: 456 HISTO: 860199
OBSERVATIONS			
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH			
-			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 80

TRT#: 4

SEX: Female

DAY ON TEST: 439

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860200

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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
Lymph Node - Mandibular	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Blood		Anisocytosis	Moderate
		Monocytosis	Moderate
Liver		Leukemia Mononuclear	
Lymph Node	Mesenteric	Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	

[Leukemia Mononuclear TGLS = 1-2]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 81

TRT#: 4

SEX: Female

DAY ON TEST: 456

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860201

OBSERVATIONS

Kidney

Nephropathy

Minimal

Mesentery

Fat

Mineralization

Mild

Fat

Necrosis

Coagulative, Moderate

Note: [MINERALIZATION] TGLs = 1-5

Note: [NECROSIS] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 82	TRT#: 4	SEX: Female	DAY ON TEST: 734
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860202

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Lipoma	
		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
Uterus		Hyperplasia	Cystic, Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 83

TRT#: 4

SEX: Female

DAY ON TEST: 733

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860203

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Esophagus	Eye	Heart
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 2-14			
Eye			
Note: EYE-TGL 1 COULD NOT BE FOUND IN RECUTS			
Note: TGL 1 COULD NOT BE FOUND IN RECUTS			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Developmental Malformation	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
Note: [DEVELOP MALFOR] TGLs = 4,5-2			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 3-15			
Pituitary Gland	Pars Distalis	Congestion	Minimal
Note: [CONGESTION] TGLs = 6-4			
Spleen		Pigmentation	Hemosiderin, Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 84	TRT#: 4	SEX: Female	DAY ON TEST: 732
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860204

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Mammary Gland
Nose	Ovary	Pancreas	Salivary Glands
Skin	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

INSUFFICIENT TISSUE

Parathyroid Gland

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-9			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-2			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 85	TRT#: 4	SEX: Female	DAY ON TEST: 456
	DOSE: 25 MG/KG	DISP: Interval Sacrifice	HISTO: 860205

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Stomach - Forestomach

Stomach - Glandular

OBSERVATIONS

Liver	Bile Duct	Hyperplasia	Minimal
Mesentery	Fat	Mineralization	Mild
	Fat	Necrosis	Coagulative, Moderate
Note: [MINERALIZATION] TGLs = 3-13			
Note: [NECROSIS] TGLs = 3-13			
Ovary	Follicle	Cyst	Moderate
[Cyst TGLS = 1-5]			
Spleen		Congestion	Marked
Note: [CONGESTION] TGLs = 4-2			
Uterus		Polyp	
Note: [POLYP] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 86

TRT#: 4

SEX: Female

DAY ON TEST: 659

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860206

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Ovary	Pituitary Gland	Thymus
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OBSERVATIONS

Liver	Basophilic Focus	
Note: [INFLAMMATION] TGLs = 3-2	Inflammation	Chronic, Minimal
Mammary Gland	Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-14		
Uterus	Polyp	
Note: [POLYP] TGLs = 1-5		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 87	TRT#: 4	SEX: Female	DAY ON TEST: 732
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860207

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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	

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 1-13			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Lung		Inflammation	Mild
Uterus		Hyperplasia	Cystic, Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 88

TRT#: 4

SEX: Female

DAY ON TEST: 729

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860208

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Skin
Thymus

Bone Marrow
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Spleen
Thyroid Gland

MISSING

Clitoral Gland

OBSERVATIONS

Heart
Kidney
Liver
Pituitary Gland
 Note: [ADENOMA] TGLs = 2-4
Uterus
 Note: [POLYP] TGLs = 1-13

Bile Duct
Pars Distalis

Cardiomyopathy
Nephropathy
Hyperplasia
Adenoma

Polyp

Mild
Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 89	TRT#: 4	SEX: Female	DAY ON TEST: 733
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860209

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	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
Lung	Lymph Node - Mandibular	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Trachea	Urinary Bladder	Uterus	

MISSING

Lymph Node - Mesenteric

OBSERVATIONS

Adrenal Gland Note: [CLEAR CL FOCUS] TGLs = 5-4	Cortex	Clear Cell Focus	Moderate
Clitoral Gland Note: [INFLAMMATION] TGLs = 2-14		Carcinoma Inflammation	Suppurative, Marked
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Mammary Gland Note: [FIBROADENOMA] TGLs = 3-15		Fibroadenoma	
Pituitary Gland Note: [ADENOMA] TGLs = 4-4	Pars Distalis	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 90

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860210

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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

OBSERVATIONS

Kidney	Nephropathy	Minimal
Liver	Basophilic Focus	
	Inflammation	Chronic, Minimal
Spleen	Pigmentation	Hemosiderin, Moderate
Note: [PIGMENT] TGLs = 1-2		
Uterus	Polyp	
Note: [POLYP] TGLs = 2-5		

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 91

TRT#: 4

SEX: Female

DAY ON TEST: 334

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860211

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Pancreas
Skin
Thymus

Bone Marrow
Heart
Intestine Small - Duodenum
Liver
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

OBSERVATIONS

Kidney
Uterus

Nephropathy
Hydrometra

Minimal
Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 92

TRT#: 4

SEX: Female

DAY ON TEST: 662

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860212

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Heart
Intestine Small - Duodenum
Lung
Pancreas
Skin
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Parathyroid Gland
Spleen
Thyroid Gland

MISSING

Clitoral Gland

OBSERVATIONS

Kidney
Liver
Lymph Node
Mammary Gland

Mesenteric

Nephropathy
Basophilic Focus
Congestion
Fibroadenoma
Fibroadenoma

Minimal
Moderate

Note: [FIBROADENOMA] TGLs = 2-13

Note: [FIBROADENOMA] TGLs = 3-14

Uterus

Hyperplasia

Cystic, Moderate

Note: [HYPERPLASIA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 93

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860213

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Skin
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Spleen
Thyroid Gland

OBSERVATIONS

Heart
Kidney
Liver

Cardiomyopathy
Nephropathy
Basophilic Focus
Inflammation
Fibroadenoma

Mild
Minimal
Chronic, Minimal

Mammary Gland

Note: [FIBROADENOMA] TGLs = 1-13

Pituitary Gland

Pars Distalis

Adenoma

Uterus

Polyp

Note: [POLYP] TGLs = 2-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 94

TRT#: 4

SEX: Female

DAY ON TEST: 455

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860214

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Inflammation

Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 95

TRT#: 4

SEX: Female

DAY ON TEST: 733

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860215

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Skin
Thymus

Bone Marrow
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Spleen
Thyroid Gland

OBSERVATIONS

Clitoral Gland

Heart
Kidney
Liver

Mesentery
Note: [NECROSIS] TGLs = 2-13
Pituitary Gland
Uterus
Note: [POLYP] TGLs = 3-5

Bile Duct
Fat

Pars Distalis

Adenoma
Inflammation
Cardiomyopathy
Nephropathy
Basophilic Focus
Hyperplasia
Necrosis

Adenoma
Polyp

Suppurative, Marked
Mild
Minimal

Minimal
Coagulative, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 96	TRT#: 4	SEX: Female	DAY ON TEST: 733
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860216

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Salivary Glands	Skin	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

MISSING

Parathyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
		Inflammation	Chronic, Minimal
		Necrosis	Coagulative, Minimal
Note: [NECROSIS] TGLs = 2-2			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 3-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Spleen		Congestion	Mild
Note: [CONGESTION] TGLs = 1-2			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 97	TRT#: 4	SEX: Female	DAY ON TEST: 733
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860217

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
Mammary Gland		Adenoma	
		Fibroadenoma	
Note: [ADENOMA] TGLs = 1-14			
Note: [FIBROADENOMA] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Cyst	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 98

TRT#: 4

SEX: Female

DAY ON TEST: 245

DOSE: 25 MG/KG

DISP: Gavage Death

HISTO: 860218

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex

Adrenal Gland - Medulla

Bone

Bone Marrow

Brain

Clitoral Gland

Heart

Intestine Large - Rectum

Liver

Lymph Node - Mandibular

Lymph Node - Mesenteric

Mammary Gland

Nose

Ovary

Parathyroid Gland

Salivary Glands

Skin

Thymus

Thyroid Gland

Trachea

Urinary Bladder

Uterus

AUTO PRECLUDES DIAG.

Esophagus

Eye

Intestine Large - Cecum

Intestine Large - Colon

Intestine Small - Duodenum

Intestine Small - Ileum

Intestine Small - Jejunum

Islets, Pancreatic

Pancreas

Pituitary Gland

Stomach - Forestomach

Stomach - Glandular

OBSERVATIONS

Kidney

Mineralization

Mild

Lung

Congestion

Mild

Note: [CONGESTION] TGLs = 1-3

Spleen

Pigmentation

Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 99	TRT#: 4	SEX: Female	DAY ON TEST: 729
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860219

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Clitoral Gland		Adenoma	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-14			
Note: [FIBROADENOMA] TGLs = 3-15			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 100

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860220

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Rectum
Islets, Pancreatic
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Skin
Thymus

Bone
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Clitoral Gland
Heart
Kidney
Liver

Mammary Gland
Note: [FIBROADENOMA] TGLs = 1-13
Pancreas
Uterus
Note: [POLYP] TGLs = 2-5

Inflammation
Cardiomyopathy
Nephropathy
Clear Cell Focus
Inflammation
Fibroadenoma

Infiltration Cellular
Polyp

Suppurative, Moderate
Mild
Minimal

Chronic, Minimal

Lymphocyte, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 101

TRT#: 4

SEX: Female

DAY ON TEST: 455

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860221

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Basophilic Focus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 102

TRT#: 4

SEX: Female

DAY ON TEST: 733

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860222

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Spleen
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Nose
Pituitary Gland
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Salivary Glands
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Skin
Thyroid Gland

OBSERVATIONS

Eye
Note: [CATARACT] TGLs = 1-13
Heart
Kidney
Liver

Mammary Gland
Note: [FIBROADENOMA] TGLs = 2-14
Stomach
Note: [PAPILLOMA SQUA] TGLs = 4-6
Uterus
Note: [POLYP] TGLs = 3-15

Lens

Bile Duct

Forestomach

Cataract

Cardiomyopathy
Nephropathy
Basophilic Focus
Hyperplasia
Fibroadenoma

Squamous Cell Papilloma

Polyp

Moderate

Mild
Moderate

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 103

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860223

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Thymus
Uterus

Bone
Esophagus
Intestine Small - Duodenum
Kidney
Nose
Salivary Glands
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Stomach - Forestomach
Trachea

OBSERVATIONS

Heart
Liver

Lung
Pituitary Gland
Skin
 Note: [FIBROMA] TGLs = 1-13
Spleen
 Note: [LEUKEMIA MONUC] TGLs = 2-2

Bile Duct

Pars Distalis
Subcut Tiss

Cardiomyopathy
Basophilic Focus
Hyperplasia
Inflammation
Cyst
Fibroma

Leukemia Mononuclear

Mild

Minimal
Mild

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 104

TRT#: 4

SEX: Female

DAY ON TEST: 654

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860224

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Clitoral Gland	Esophagus	Heart
Intestine Large - Colon	Intestine Large - Rectum	Islets, Pancreatic	Lung
Lymph Node - Mandibular	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
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OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Lymph Node	Mesenteric	Congestion	Mild
Mammary Gland		Galactoceles	
Note: [GALACTOCELE] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 1-4]			
Stomach	Forestomach	Hyperkeratosis	Mild
Note: [HYPERKERATOSIS] TGLs = 3-6			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 105

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860225

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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
Lung	Lymph Node - Mandibular	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Gland	Medulla	Basophilic Focus	Mild
Clitoral Gland		Adenoma	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-2			
Lymph Node	Mesenteric	Leukemia Mononuclear	
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 6-4			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-2			
Stomach	Forestomach	Squamous Cell Papilloma	
Uterus		Polyp	
Note: [POLYP] TGLs = 3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 106	TRT#: 4	SEX: Female	DAY ON TEST: 729
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860226

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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			

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Developmental Malformation	
	Bile Duct	Hyperplasia	Minimal
[Developmental Malformation TGLS = 1-2]			
Pituitary Gland	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 107

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860227

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Brain Note: [HEMORRHAGE] TGLs = 2-7	Hypothalamus	Hemorrhage	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
Lung Note: [HYPERPLASIA] TGLs = 4-12	Alveolar Epith	Hyperplasia	Moderate
Mammary Gland Note: [FIBROADENOMA] TGLs = 1-13		Fibroadenoma	
Pituitary Gland Note: [ADENOMA] TGLs = 3-4	Pars Distalis	Adenoma	
Stomach	Forestomach	Hyperkeratosis	Moderate
	Forestomach	Inflammation	Suppurative, Mild
Note: [HYPERKERATOSIS] TGLs = 5-6			
Uterus		Polyp	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 108

TRT#: 4

SEX: Female

DAY ON TEST: 733

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860228

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Skin
Thymus

Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Spleen
Thyroid Gland

OBSERVATIONS

Adrenal Gland
Note: [PHEOCHROM BGN] TGLs = 3-4
Heart
Kidney
Liver

Note: [INFLAMMATION] TGLs = 4-2
Mesentery
Note: [NECROSIS] TGLs = 2-4
Pituitary Gland
Uterus
Note: [POLYP] TGLs = 1-15

Medulla

Fat

Pars Distalis

Pheochromocytoma Benign

Cardiomyopathy
Nephropathy
Basophilic Focus
Inflammation

Necrosis

Cyst
Polyp

Mild
Minimal
Chronic, Moderate
Coagulative, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 109	TRT#: 4	SEX: Female	DAY ON TEST: 732
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860229

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Clitoral Gland		Adenoma	
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-13			
Nose		Inflammation	Suppurative, Moderate
Pituitary Gland	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 110

TRT#: 4

SEX: Female

DAY ON TEST: 547

DOSE: 25 MG/KG

DISP: Dead

HISTO: 860230

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Clitoral Gland	Esophagus	Heart	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Jejunum	Islets, Pancreatic	Kidney
Liver	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Ovary	Pancreas
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

MISSING

Parathyroid Gland

AUTO PRECLUDES DIAG.

Intestine Large - Cecum

Intestine Large - Colon

Intestine Small - Ileum

OBSERVATIONS

Brain	Hypothalamus	Hemorrhage	Marked
Note: [HEMORRHAGE] TGLs = 2-7			
Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 1-4]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 111

TRT#: 4

SEX: Female

DAY ON TEST: 732

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860231

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Mild
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
Note: [INFLAMMATION] TGLs = 4-2			
Mammary Gland		Fibroadenoma	
		Galactocele	Moderate
		Inflammation	Moderate
Note: [FIBROADENOMA] TGLs = 1-13			
Note: [INFLAMMATION] TGLs = 3-5			
Note: [GALACTOCELE] TGLs = 2-13			
Ovary	Follicle	Cyst	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 112	TRT#: 4	SEX: Female	DAY ON TEST: 734
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860232

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
[Nephropathy TGLS = 1-1]			
Liver		Developmental Malformation	
[Developmental Malformation TGLS = 2-2]		Inflammation	Chronic, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Uterus		Hydrometra	Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 113

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860233

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Adrenal Gland - Medulla
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Clitoral Gland
Note: [DILATATION] TGLs = 1-5
Kidney
Liver

Duct

Bile Duct

Dilatation
Nephropathy
Basophilic Focus
Hyperplasia

Marked

Minimal

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 114	TRT#: 4	SEX: Female	DAY ON TEST: 732
	DOSE: 25 MG/KG	DISP: Terminal Sacrifice	HISTO: 860234

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

MISSING

Lymph Node - Mandibular

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
Mammary Gland		Galactoceles	Marked
Note: [GALACTOCELE] TGLs = 3-13			
Note: [GALACTOCELE] TGLs = 2-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 115

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860235

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

AUTO PRECLUDES DIAG.

Pituitary Gland

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 1-5			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 2-14			
Mesentery	Fat	Cyst	Marked
Note: [CYST] TGLs = 4-13			
Uterus		Polyp	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 116

TRT#: 4

SEX: Female

DAY ON TEST: 456

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860236

OBSERVATIONS

Kidney

Nephropathy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 117

TRT#: 4

SEX: Female

DAY ON TEST: 713

DOSE: 25 MG/KG

DISP: Moribund

HISTO: 860237

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Spleen
Stomach - Glandular	Thymus	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Brain Note: [COMPRESSION] TGLs = 2-7	Hypothalamus	Compression	Moderate
Kidney		Nephropathy	Mild
Liver		Eosinophilic Focus	
Mesentery Note: [NECROSIS] TGLs = 4-15	Fat	Necrosis	Coagulative, Moderate
Pituitary Gland Note: [ADENOMA] TGLs = 1-4	Pars Distalis	Adenoma	
Skin Note: [CYST EPITH INC] TGLs = 7-14		Cyst Epithelial Inclusion	
Stomach Note: [HYPERPLASIA] TGLs = 6-13	Forestomach	Hyperplasia	Squamous, Mild
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 118

TRT#: 4

SEX: Female

DAY ON TEST: 734

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860238

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Glandular	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

MISSING

Thymus

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
Mesentery	Fat	Inflammation	Chronic, Marked
Note: [INFLAMMATION] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Stomach	Forestomach	Hyperplasia	Squamous, Moderate
	Forestomach	Ulcer	Moderate
Note: [HYPERPLASIA] TGLs = 4-13			
Note: [ULCER] TGLs = 1-13			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 119

TRT#: 4

SEX: Female

DAY ON TEST: 456

DOSE: 25 MG/KG

DISP: Interval Sacrifice

HISTO: 860239

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Developmental Malformation

Note: [DEVELOP MALFOR] TGLs = 1-2

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 120

TRT#: 4

SEX: Female

DAY ON TEST: 733

DOSE: 25 MG/KG

DISP: Terminal Sacrifice

HISTO: 860240

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-5			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
Mammary Gland		Fibroadenoma	
		Galactocele	Marked
Note: [FIBROADENOMA] TGLs = 3-16			
Note: [GALACTOCELE] TGLs = 2-15			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 6-4			
Skin		Cyst Epithelial Inclusion	
Note: [CYST EPITH INC] TGLs = 4-13			
Uterus		Polyp	
Note: [POLYP] TGLs = 5-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 121

TRT#: 6

SEX: Female

DAY ON TEST: 456

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 860301

OBSERVATIONS

Kidney

Nephropathy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 122

TRT#: 6
DOSE: 50 MG/KG

SEX: Female
DISP: Interval Sacrifice

DAY ON TEST: 456
HISTO: 860302

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Hepatocyte	Degeneration Fatty Change	Granular, Minimal Mild
Uterus		Polyp	

[Polyp TGLS = 1-5]

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 123

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860303

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Ovary	Pancreas
Salivary Glands	Skin	Stomach - Forestomach	Stomach - Glandular
Thymus	Trachea	Urinary Bladder	Uterus

MISSING

Parathyroid Gland

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-13			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Developmental Malformation	
Note: [DEVELOP MALFOR] TGLs = 3-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Spleen		Congestion	Moderate
Note: [CONGESTION] TGLs = 2-2			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 124

TRT#: 6

SEX: Female

DAY ON TEST: 635

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860304

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Salivary Glands	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 2-1]			
Liver		Fatty Change	Mild
		Necrosis	Coagulative, Minimal
Parathyroid Gland		Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 4-13			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 125

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860305

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Esophagus
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Bone Marrow		Hyperplasia	Neutrophil, Moderate
Brain	Hypothalamus	Compression	Moderate
Clitoral Gland		Carcinoma	
		Inflammation	Suppurative, Marked
Note: [CARCINOMA] TGLs = 1-13			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
		Galactocele	Marked
Note: [FIBROADENOMA] TGLs = 2-14			
Note: [GALACTOCELE] TGLs = 3-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 5-4			
Spleen		Hyperplasia	Lymphoid, Marked
Note: [HYPERPLASIA] TGLs = 4-2			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 126

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860306

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Adrenal Gland
Note: [PHEOCHROM BGN] TGLs = 1-4
Kidney
Liver

Medulla
Hepatocyte
Bile Duct

Pheochromocytoma Benign
Nephropathy
Degeneration
Hyperplasia
Inflammation
Necrosis

Mild
Granular, Mild
Mild
Chronic, Mild
Coagulative, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 127

TRT#: 6

SEX: Female

DAY ON TEST: 455

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 860307

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Fatty Change

Minimal

Inflammation

Chronic, Minimal

Necrosis

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 128

TRT#: 6

SEX: Female

DAY ON TEST: 709

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860308

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Brain	Cerebrum	Hemorrhage	Moderate
	Meninges	Meningioma Nos	
Note: [HEMORRHAGE] TGLs = 2-7			
Note: [MENINGIOMA NOS] TGLs = 2-14			
Kidney		Nephropathy	Mild
Liver		Fatty Change	Mild
		Inflammation	Suppurative, Mild
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 1-13			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Cyst	Moderate
Note: [CYST] TGLs = 3-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 129

TRT#: 6

SEX: Female

DAY ON TEST: 729

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860309

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Brain	Hypothalamus	Compression	Moderate
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
Lung	Alveolar Epith	Hyperplasia	Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 2-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 130

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860310

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Heart		Fibrosis	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Cyst	Moderate
		Eosinophilic Focus	
		Inflammation	Chronic, Moderate
Note: [CYST] TGLs = 2-2 [Cyst TGLS = 1-2]			
Mammary Gland		Galactocele	Mild
Mesentery	Fat	Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 3-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Uterus		Hydrometra	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 131

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860311

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Mild
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 132	TRT#: 6	SEX: Female	DAY ON TEST: 67
	DOSE: 50 MG/KG	DISP: Gavage Death	HISTO: 860312

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Clitoral Gland	Heart	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Islets, Pancreatic	Kidney	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Ovary	Pancreas
Pituitary Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

MISSING

Esophagus	Parathyroid Gland
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OBSERVATIONS

Liver	Developmental Malformation	
Note: NORMAL PARENCHYMA		
Lung	Foreign Body	Minimal
Note: LESION SUGGESTION OF LIPID FOREIGN BODY		
Nose	Congestion	Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 133

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860313

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
Parathyroid Gland		Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	

Note: [ADENOMA] TGLs = 1-4

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 134	TRT#: 6	SEX: Female	DAY ON TEST: 732
	DOSE: 50 MG/KG	DISP: Dead	HISTO: 860314

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Brain	Esophagus	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Parathyroid Gland	Salivary Glands	Skin
Thymus	Trachea		

MISSING

Clitoral Gland	Intestine Large - Cecum
----------------	-------------------------

AUTO PRECLUDES DIAG.

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone Marrow	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Pancreas	Pituitary Gland	Spleen
Stomach - Glandular	Thyroid Gland	Urinary Bladder	Uterus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Fatty Change	Mild
Stomach	Forestomach	Hyperkeratosis	Moderate

Note: [HYPERKERATOSIS] TGLs = 1-6

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 135

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860315

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	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 - Mandibular

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Marked
[Inflammation TGLS = 2-15]			
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 3-16,4-17			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-14			
Pituitary Gland	Pars Distalis	Adenoma	
[Adenoma TGLS = 5-4]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 136

TRT#: 6

SEX: Female

DAY ON TEST: 456

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 860316

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Skin

OBSERVATIONS

Clitoral Gland

Inflammation

Suppurative, Marked

Note: [INFLAMMATION] TGLs = 1-5

Kidney

Nephropathy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 137

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860317

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Mammary Gland
Salivary Glands
Stomach - Glandular

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Lung
Nose
Skin
Thyroid Gland

Bone
Esophagus
Intestine Small - Duodenum
Lymph Node - Mandibular
Ovary
Spleen
Trachea

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mesenteric
Pancreas
Stomach - Forestomach
Urinary Bladder

MISSING

Parathyroid Gland

INSUFFICIENT TISSUE

Thymus

OBSERVATIONS

Heart
Islets, Pancreatic
Kidney
Liver

Pituitary Gland
Note: [ADENOMA] TGLs = 2-4
Uterus
Note: [POLYP] TGLs = 1-13

Bile Duct
Pars Distalis

Cardiomyopathy
Adenoma
Nephropathy
Basophilic Focus
Hyperplasia
Adenoma

Polyp

Mild
Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 138

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860318

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Kidney
Liver

Bile Duct

Nephropathy
Hyperplasia
Inflammation

Mild
Minimal
Chronic, Mild

Note: [INFLAMMATION] TGLs = 2-2

Uterus

Hyperplasia

Cystic, Mild

Note: [HYPERPLASIA] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 139

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860319

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Rectum
Islets, Pancreatic
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Skin
Thymus
Uterus

Bone Marrow
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Spleen
Thyroid Gland

OBSERVATIONS

Clitoral Gland
Note: [INFLAMMATION] TGLs = 2-5

Inflammation

Suppurative, Marked

Heart
Kidney
Liver

Cardiomyopathy
Nephropathy
Hyperplasia
Inflammation
Fibroadenoma

Mild
Minimal
Minimal
Chronic, Mild

Bile Duct

Mammary Gland
Note: [FIBROADENOMA] TGLs = 1-13

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 140

TRT#: 6
DOSE: 50 MG/KG

SEX: Female
DISP: Interval Sacrifice

DAY ON TEST: 456
HISTO: 860320

OBSERVATIONS

Kidney	Nephropathy	Minimal
Liver	Fatty Change	Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 141

TRT#: 6

SEX: Female

DAY ON TEST: 189

DOSE: 50 MG/KG

DISP: Gavage Death

HISTO: 860321

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Thymus
Uterus

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thyroid Gland

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Bone Marrow
Heart
Intestine Small - Duodenum
Liver
Nose
Pituitary Gland
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Kidney

Lung
Note: [CONGESTION] TGLs = 2-3
Skin
Note: NOT SKIN FROM FACE.
Note: SNIN-NO LESION IN SECTION SUBMITTED BUT WAS

Mineralization
Nephropathy
Congestion

Minimal
Minimal
Mild

Spleen

Pigmentation

Hemosiderin, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 142	TRT#: 6	SEX: Female	DAY ON TEST: 733
	DOSE: 50 MG/KG	DISP: Terminal Sacrifice	HISTO: 860322

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
Note: [INFLAMMATION] TGLs = 2-2			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 3-13			
Pituitary Gland	Pars Distalis	Cyst	
Uterus		Hydrometra	Moderate
Note: [HYDROMETRA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 143

TRT#: 6

SEX: Female

DAY ON TEST: 637

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860323

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Bone Marrow	Brain	Clitoral Gland
Esophagus	Heart	Intestine Large - Cecum	Intestine Large - Rectum
Mammary Gland	Nose	Ovary	Parathyroid Gland
Salivary Glands	Skin	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

AUTO PRECLUDES DIAG.

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Islets, Pancreatic	Pancreas	Pituitary Gland

OBSERVATIONS

Intestine Large	Colon	Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-2			
Lung		Inflammation	Moderate
		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-4			
Oviduct		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-2			
Stomach	Forestomach	Leukemia Mononuclear	
	Glandular	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-13			
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 144

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860324

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
Pituitary Gland	Pars Nervosa	Cyst Multilocular	Moderate
Skin		Lipoma	
Note: [LIPOMA] TGLs = 2-13			
Uterus		Hydrometra	Moderate
Note: [HYDROMETRA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 145

TRT#: 6

SEX: Female

DAY ON TEST: 601

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860325

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
Clitoral Gland	Esophagus	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
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Moderate
		Fibrosis	Moderate
		Thrombosis	Moderate
Kidney		Nephropathy	Mild
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-2			
Lung		Leukemia Mononuclear	
Lymph Node	Mandibular	Leukemia Mononuclear	
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 6-13			
Pituitary Gland	Pars Distalis	Cyst	Moderate
Note: [CYST] TGLs = 5-4			
Spleen	Sinusoid	Dilatation	Marked
		Leukemia Mononuclear	
Note: [DILATATION] TGLs = 2-14			
Note: [LEUKEMIA MONUC] TGLs = 1-2			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 7-6			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 146

TRT#: 6

SEX: Female

DAY ON TEST: 565

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860326

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Pituitary Gland	Salivary Glands
Skin	Spleen	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Kidney	Cortex	Cyst	Mild
		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 2-1			
Note: [CYST] TGLs = 3-13			
Liver		Fibrosis	Minimal
		Necrosis	Coagulative, Moderate
Parathyroid Gland		Hyperplasia	Mild
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 1-14,4-14			
[Ulcer TGLS = 5-14]			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 147

TRT#: 6

SEX: Female

DAY ON TEST: 729

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860327

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Skin
Thymus
Uterus

OBSERVATIONS

Heart
Kidney
Liver

Cardiomyopathy
Nephropathy
Basophilic Focus
Fatty Change
Hyperplasia
Adenoma

Mild
Mild

Mild
Minimal

Pituitary Gland
Note: [ADENOMA] TGLs = 1-4

Bile Duct
Pars Distalis

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 148

TRT#: 6

SEX: Female

DAY ON TEST: 554

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860328

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Clitoral Gland	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Jejunum
Islets, Pancreatic	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Stomach - Glandular	Thyroid Gland	Trachea
Uterus			

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Intestine Small	Ileum	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 8-6			
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 6-2			
Note: [HYPERPLASIA] TGLs = 5-2			
Lung		Leukemia Mononuclear	
Lymph Node	Lumbar	Leukemia Mononuclear	
	Mandibular	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-9			
Note: [LEUKEMIA MONUC] TGLs = 7-14			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-2,4-2			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 8-6			

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 148

TRT#: 6
DOSE: 50 MG/KG

SEX: Female
DISP: Moribund

DAY ON TEST: 554
HISTO: 860328

ORGAN AND ACCOUNTABLE SITE STATUS

Thymus
Urinary Bladder

Leukemia Mononuclear
Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 149

TRT#: 6

SEX: Female

DAY ON TEST: 729

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860329

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Clitoral Gland	Duct	Dilatation	Mild
Note: [DILATATION] TGLs = 8-5			
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-2			
Mammary Gland		Fibroadenoma	
		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-15			
Note: [FIBROADENOMA] TGLs = 3-16			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 7-4			
Skin	Subcut Tiss	Fibroma	
Note: [FIBROMA] TGLs = 1-14			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-13			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 150

TRT#: 6

SEX: Female

DAY ON TEST: 729

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860330

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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
Lymph Node - Mesenteric	Mammary Gland	Mesentery	Nose
Ovary	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Stomach - Glandular	Thymus	Thyroid Gland
Trachea			

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Moderate
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC]			
TGLs = 5-14			
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC]			
TGLs = 1-12			
Lymph Node	Pancreatic	Hemorrhage	Acute, Moderate
	Mandibular	Leukemia Mononuclear	
Note: [HEMORRHAGE]			
TGLs = 4-13			
Pancreas	Acinus	Atrophy	Moderate
Spleen		Leukemia Mononuclear	
[Leukemia Mononuclear TGLS = 3-2]			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER]			
TGLs = 6-6			
Urinary Bladder		Leukemia Mononuclear	
Uterus		Polyp	
Note: [POLYP]			
TGLs = 2-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 151

TRT#: 6

SEX: Female

DAY ON TEST: 455

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 860331

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Hepatocyte

Degeneration

Granular, Minimal

Fatty Change

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 152

TRT#: 6

SEX: Female

DAY ON TEST: 456

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 860332

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Hepatocyte

Degeneration

Granular, Minimal

Developmental Malformation

Fatty Change

Minimal

Inflammation

Chronic, Minimal

Note: [DEVELOP MALFOR] TGLs = 2-2

Mesentery

Fat

Mineralization

Mild

Fat

Necrosis

Coagulative, Mild

Note: [NECROSIS] TGLs = 1-5

Note: [MINERALIZATION] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 153

TRT#: 6

SEX: Female

DAY ON TEST: 13

DOSE: 50 MG/KG

DISP: Gavage Death

HISTO: 860333

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Kidney
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone
Intestine Large - Cecum
Intestine Small - Ileum
Liver
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Bone Marrow
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Brain	Meninges	Hemorrhage	Minimal
Heart		Cardiomyopathy	Minimal
Lung		Foreign Body	Minimal

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 154

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860334

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Clitoral Gland	Duct	Dilatation	Mild
Note: [DILATATION] TGLs = 5-5			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Basophilic Focus	
		Degeneration	Granular, Mild
	Bile Duct	Developmental Malformation	
		Hyperplasia	Minimal
Note: [DEVELOP MALFOR] TGLs = 2-13			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 155

TRT#: 6

SEX: Female

DAY ON TEST: 34

DOSE: 50 MG/KG

DISP: Gavage Death

HISTO: 860335

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Jejunum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Islets, Pancreatic
Lymph Node - Mesenteric
Pancreas
Skin
Thymus

Bone
Esophagus
Intestine Small - Duodenum
Kidney
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Harderian Gland
Intestine Small - Ileum
Liver
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

MISSING

Intestine Large - Rectum

OBSERVATIONS

Heart
Lung
 Note: [FOREIGN BODY] TGLs = 1-3
Ovary
 Note: PROMINANT CL'S
Uterus

Cardiomyopathy
Foreign Body

Minimal
Minimal

Hydrometra

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 156

TRT#: 6

SEX: Female

DAY ON TEST: 729

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860336

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	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

Clitoral Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Inflammation	Chronic, Mild
Lymph Node	Mandibular	Hyperplasia	Plasma Cell, Moderate
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 3-14			
Mesentery	Fat	Necrosis	Coagulative, Minimal
Note: [NECROSIS] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 157

TRT#: 6

SEX: Female

DAY ON TEST: 455

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 860337

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Developmental Malformation

Note: [DEVELOP MALFOR] TGLs = 2-2

Uterus

Polyp

Note: [POLYP] TGLs = 1-5

PRIMARY CAUSE OF DEATH

-

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 158

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860338

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Mild
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
		Mixed Cell Focus	
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 1-13			
Uterus		Hydrometra	Moderate
Note: [HYDROMETRA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 159

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860339

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Mammary Gland	Nose	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

INSUFFICIENT TISSUE

Lymph Node - Mesenteric

OBSERVATIONS

Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 2-1]			
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Minimal
Ovary		Granulosa-Theca Tumor Benign	
Note: [GRAN THECA BGN] TGLs = 1-5			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 160

TRT#: 6

SEX: Female

DAY ON TEST: 705

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860340

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Bone Marrow	Brain	Clitoral Gland
Esophagus	Intestine Large - Colon	Intestine Small - Duodenum	Nose
Parathyroid Gland	Skin	Thyroid Gland	Trachea

OBSERVATIONS

Adrenal Gland	Medulla	Leukemia Mononuclear	
Bone		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Intestine Large	Cecum	Leukemia Mononuclear	
	Rectum	Leukemia Mononuclear	
Intestine Small	Ileum	Leukemia Mononuclear	
	Jejunum	Leukemia Mononuclear	
Islets, Pancreatic		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-2			
Lung		Leukemia Mononuclear	
Lymph Node	Lumbar	Leukemia Mononuclear	
	Mandibular	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Mesenteric	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 9-13			
Note: [LEUKEMIA MONUC] TGLs = 5-15			
Note: [LEUKEMIA MONUC] TGLs = 8-4			
Note: [LEUKEMIA MONUC] TGLs = 6-9			
Note: [LEUKEMIA MONUC] TGLs = 7-4			
[Leukemia Mononuclear TGLS = 10-9]			
Mammary Gland		Leukemia Mononuclear	

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 160

TRT#: 6

SEX: Female

DAY ON TEST: 705

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860340

ORGAN AND ACCOUNTABLE SITE STATUS

Mesentery		Leukemia Mononuclear	
Ovary	Corpus Luteum	Cyst	Moderate
Pancreas		Leukemia Mononuclear	
Pituitary Gland		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-4			
Salivary Glands		Leukemia Mononuclear	
Skeletal Muscle		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-14			
Stomach	Forestomach	Leukemia Mononuclear	
	Glandular	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-6			
Thymus		Leukemia Mononuclear	
Urinary Bladder		Leukemia Mononuclear	
Uterus		Leukemia Mononuclear	
PRIMARY CAUSE OF DEATH	-		

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 161	TRT#: 6	SEX: Female	DAY ON TEST: 733
	DOSE: 50 MG/KG	DISP: Terminal Sacrifice	HISTO: 860341

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Fatty Change	Minimal
		Inflammation	Chronic, Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-14			
Mesentery	Fat	Inflammation	Chronic, Mild
Note: [INFLAMMATION] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Adenoma	
Thyroid Gland	Follicular Cel	Carcinoma	
Note: [CARCINOMA] TGLs = 3-9			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 162

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860342

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lung
Nose
Skin
Thymus
Uterus

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mandibular
Ovary
Spleen
Thyroid Gland

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Lymph Node - Mesenteric
Parathyroid Gland
Stomach - Forestomach
Trachea

Bone Marrow
Heart
Intestine Small - Duodenum
Liver
Mammary Gland
Salivary Glands
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Kidney
Pancreas
Pituitary Gland
Note: [ADENOMA] TGLs = 1-4

Acinus
Pars Distalis

Nephropathy
Atrophy
Adenoma

Mild
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 163

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860343

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	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	

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Mild
Note: [INFLAMMATION] TGLs = 1-5			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-14			
Zymbal's Gland		Squamous Cell Carcinoma	
Note: [SQUAM CEL CARC] TGLs = 3-13			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 164

TRT#: 6

SEX: Female

DAY ON TEST: 21

DOSE: 50 MG/KG

DISP: Gavage Death

HISTO: 860344

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Liver
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Kidney
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

MISSING

Lymph Node - Mandibular

OBSERVATIONS

Lung
Uterus

Foreign Body
Hydrometra

Minimal
Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 165	TRT#: 6	SEX: Female	DAY ON TEST: 734
	DOSE: 50 MG/KG	DISP: Terminal Sacrifice	HISTO: 860345

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 166

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO:

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Kidney
Liver

Nephropathy
Basophilic Focus
Developmental Malformation
Hyperplasia

Mild

Bile Duct

Minimal

Note: [HYPERPLASIA] TGLs = 2-2

Note: [DEVELOP MALFOR] TGLs = 1-2

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 167

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860347

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-14			
Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 168	TRT#: 6	SEX: Female	DAY ON TEST: 732
	DOSE: 50 MG/KG	DISP: Terminal Sacrifice	HISTO: 860348

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Mild
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Cyst	Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 169

TRT#: 6

SEX: Female

DAY ON TEST: 622

DOSE: 50 MG/KG

DISP: Dead

HISTO: 860349

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Brain	Hypothalamus	Compression	Moderate
Note: CEREBRAL COMPRESSION CAUSED BY MASSIVE PITUITARY ADENOMA.			
Note: [COMPRESSION] TGLs = 2-7			
Kidney		Nephropathy	Mild
Liver		Fatty Change	Moderate
		Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 3-2,4-2			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Stomach	Forestomach	Inflammation	Chronic, Moderate
Thyroid Gland	Follicle	Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 170

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860350

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Adrenal Gland	Medulla	Infiltration Cellular	Lymphocyte, Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 3-14			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Cyst	
Note: [CYST] TGLs = 1-4			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 171

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860351

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Blood Vessel		Polyarteritis	Chronic, Moderate
Eye		Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 2-13			
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 1-14			
Pituitary Gland	Pars Distalis	Adenoma	
Uterus		Polyp	
Note: [POLYP] TGLs = 3-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 172	TRT#: 6	SEX: Female	DAY ON TEST: 733
	DOSE: 50 MG/KG	DISP: Terminal Sacrifice	HISTO: 860352

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Pancreas	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Moderate
Clitoral Gland		Inflammation	Suppurative, Moderate
Ear		Squamous Cell Papilloma	
Note: [PAPILOMA SQUA] TGLs = 1-13			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Inflammation	Chronic, Minimal
Mammary Gland		Fibroadenoma	
		Fibrosarcoma	
Note: [FIBROSARC] TGLs = 3-15			
Note: [FIBROADENOMA] TGLs = 2-14			
Ovary	Follicle	Cyst	Moderate
Note: [CYST] TGLs = 4-5			
Pituitary Gland	Pars Distalis	Cyst	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 173

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860353

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Trachea

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Bone
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular

Bone Marrow
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus

OBSERVATIONS

Clitoral Gland
Note: [DILATATION] TGLs = 1-5
Heart
Kidney
Liver

Thyroid Gland
Uterus
Note: [POLYP] TGLs = 2-5

Duct

Hepatocyte
Bile Duct

C Cell

Dilatation

Cardiomyopathy
Nephropathy
Basophilic Focus
Degeneration
Hyperplasia
Inflammation
Hyperplasia
Polyp

Moderate

Mild
Minimal

Granular, Minimal
Minimal
Chronic, Mild
Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:34

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 174

TRT#: 6

SEX: Female

DAY ON TEST: 733

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860354

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Kidney	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Liver	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Cyst	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 175

TRT#: 6

SEX: Female

DAY ON TEST: 732

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860355

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Clitoral Gland	Duct	Dilatation	Moderate
Note: [DILATATION] TGLs = 1-5			
Kidney		Inflammation	Suppurative, Mild
		Nephropathy	Minimal
Liver		Basophilic Focus	
	Bile Duct	Hyperplasia	Minimal
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 2-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Uterus		Hydrometra	Marked
Note: [HYDROMETRA] TGLs = 3-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:34
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 176

TRT#: 6

SEX: Female

DAY ON TEST: 734

DOSE: 50 MG/KG

DISP: Terminal Sacrifice

HISTO: 860356

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	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	Lung	Lymph Node - Mandibular	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	

OBSERVATIONS

Adrenal Gland	Medulla	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Developmental Malformation	
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Mild
Note: [DEVELOP MALFOR] TGLs = 1-2			
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 4-14			
Mesentery	Fat	Necrosis	Coagulative, Moderate
Note: [NECROSIS] TGLs = 2-13,3-13			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 177	TRT#: 6	SEX: Female	DAY ON TEST: 734
	DOSE: 50 MG/KG	DISP: Terminal Sacrifice	HISTO: 860357

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder	Uterus		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Hyperplasia	Minimal
Mammary Gland		Fibroadenoma	
		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-13			
Note: [FIBROADENOMA] TGLs = 1-13			
Note: [FIBROADENOMA] TGLs = 3-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 178

TRT#: 6

SEX: Female

DAY ON TEST: 456

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 860358

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Developmental Malformation

Inflammation

Chronic, Mild

Note: [DEVELOP MALFOR] TGLs = 1-2

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 179

TRT#: 6

SEX: Female

DAY ON TEST: 455

DOSE: 50 MG/KG

DISP: Interval Sacrifice

HISTO: 860359

OBSERVATIONS

Kidney

Nephropathy

Minimal

Liver

Bile Duct

Hyperplasia

Minimal

Uterus

Hydrometra

Marked

[Hydrometra TGLS = 1-5]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 180

TRT#: 6

SEX: Female

DAY ON TEST: 691

DOSE: 50 MG/KG

DISP: Moribund

HISTO: 860360

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Kidney [Nephropathy TGLS = 3-1]		Nephropathy	Moderate
Liver [Developmental Malformation TGLS = 2-13]		Developmental Malformation Fatty Change	Minimal
Mammary Gland Note: [GALACTOCELE] TGLs = 1-14		Galactocele	
Pituitary Gland [Adenoma TGLS = 6-4]	Pars Distalis	Adenoma	
Stomach [Ulcer TGLS = 4-6]	Forestomach	Ulcer	Marked

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 181	TRT#: 8	SEX: Female	DAY ON TEST: 456
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860421

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Pituitary Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thymus	Thyroid Gland	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Moderate
	Bile Duct	Hyperplasia	Minimal
Uterus		Hydrometra	Moderate

Note: [HYDROMETRA] TGLs = 1-5,2-5

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 182

TRT#: 8

SEX: Female

DAY ON TEST: 729

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860422

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Spleen
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Nose
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Salivary Glands
Stomach - Glandular
Uterus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Skin
Thymus

OBSERVATIONS

Heart
Kidney
Liver

Cardiomyopathy
Nephropathy
Basophilic Focus
Degeneration
Fibroadenoma

Mild
Mild

Hepatocyte

Carcinoma

Granular, Mild

Mammary Gland

Note: [FIBROADENOMA] TGLs = 1-13

Thyroid Gland

C Cell

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 183

TRT#: 8

SEX: Female

DAY ON TEST: 733

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860423

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Uterus

OBSERVATIONS

Kidney		Nephropathy	Mild
[Nephropathy TGLS = 1-1]			
Liver	Hepatocyte	Basophilic Focus	Granular, Moderate
	Bile Duct	Degeneration	Minimal
		Hyperplasia	Chronic, Minimal
		Inflammation	
Pituitary Gland	Pars Distalis	Adenoma	
Urinary Bladder		Squamous Cell Papilloma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 184

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860424

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Mild
	Bile Duct	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Hyperkeratosis	Moderate

Note: [HYPERKERATOSIS] TGLs = 1-13

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 185

TRT#: 8

SEX: Female

DAY ON TEST: 651

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860425

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Spleen	Stomach - Glandular	Thymus
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Moderate
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 1-1]			
Liver		Cytologic Alterations	Moderate
		Fibrosis	Moderate
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 3-6,4-6			
Thyroid Gland	Follicular Cel	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 186

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860426

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Mild
Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Mixed Cell Focus	
Pancreas	Acinus	Atrophy	Marked
Pituitary Gland	Pars Distalis	Cyst	Moderate
Uterus		Hydrometra	Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 187

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860427

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney	Cortex	Cyst	Marked
		Nephropathy	Mild
Note: [CYST] TGLs = 1-1			
Liver	Hepatocyte	Basophilic Focus	Granular, Mild
	Bile Duct	Degeneration	Mild
		Hyperplasia	Chronic, Minimal
		Inflammation	Mild
Pituitary Gland	Pars Distalis	Cyst	Minimal
Uterus		Hydrometra	
Note: [HYDROMETRA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 188

TRT#: 8

SEX: Female

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860428

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Ovary
Skin
Thymus

Bone
Esophagus
Intestine Small - Duodenum
Lung
Pancreas
Spleen
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mesenteric
Parathyroid Gland
Stomach - Forestomach
Trachea

MISSING

Lymph Node - Mandibular

Mammary Gland

OBSERVATIONS

Heart
Kidney
Liver
Pituitary Gland
 Note: [CYST] TGLs = 2-4
Uterus
 Note: [POLYP] TGLs = 1-5

Hepatocyte
Pars Distalis

Cardiomyopathy
Nephropathy
Degeneration
Cyst
Polyp

Mild
Minimal
Granular, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 189

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860429

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Skin
Thymus
Uterus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Spleen
Thyroid Gland

OBSERVATIONS

Heart
Kidney
Note: [NEPHROPATHY] TGLs = 1-1
Liver

Pancreas
Pituitary Gland
Note: [ADENOMA] TGLs = 2-4

Hepatocyte

Acinus
Pars Distalis

Cardiomyopathy
Nephropathy

Degeneration
Eosinophilic Focus
Inflammation
Atrophy
Adenoma

Mild
Moderate

Granular, Minimal

Chronic, Minimal
Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 190

TRT#: 8

SEX: Female

DAY ON TEST: 375

DOSE: 100MG/KG

DISP: Dead

HISTO: 860430

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Esophagus	Mammary Gland	Ovary	Pituitary Gland
Salivary Glands	Skin	Trachea	

MISSING

Clitoral Gland	Lymph Node - Mandibular	Parathyroid Gland	
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AUTO PRECLUDES DIAG.

Adrenal Gland - Medulla	Brain	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Kidney	Lymph Node - Mesenteric	Nose
Pancreas	Stomach - Forestomach	Stomach - Glandular	Thyroid Gland
Urinary Bladder	Uterus		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear
Bone		Leukemia Mononuclear
Bone Marrow		Leukemia Mononuclear
Heart		Leukemia Mononuclear
Liver		Leukemia Mononuclear
Lung		Leukemia Mononuclear
Spleen		Leukemia Mononuclear
Thymus		Leukemia Mononuclear

Note: [LEUKEMIA MONUC] TGLs = 1-12

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 191	TRT#: 8	SEX: Female	DAY ON TEST: 455
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860431

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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		

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Mild
		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 192

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860432

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Stomach - Forestomach
Trachea

Adrenal Gland - Medulla
Esophagus
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Skin
Thymus
Uterus

Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Spleen
Thyroid Gland

OBSERVATIONS

Bone
Heart
Kidney
Liver

Osteopetrosis
Cardiomyopathy
Nephropathy
Basophilic Focus
Degeneration
Developmental Malformation
Hyperplasia
Inflammation

Moderate
Mild
Mild
Granular, Mild
Minimal
Chronic, Minimal

Hepatocyte

Bile Duct

Note: [DEVELOP MALFOR] TGLs = 1-13

Pituitary Gland

Pars Distalis

Adenoma

Note: [ADENOMA] TGLs = 2-4

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 193

TRT#: 8

SEX: Female

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860433

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Kidney
Liver

Nephropathy
Developmental Malformation
Fatty Change
Inflammation

Minimal

Mild
Chronic, Minimal

Note: [DEVELOP MALFOR] TGLs = 1-2

Uterus

Hydrometra

Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 194

TRT#: 8

SEX: Female

DAY ON TEST: 679

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860434

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Spleen	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	Vagina

OBSERVATIONS

Heart		Mineralization	Mild
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 2-1]			
Liver		Cytologic Alterations	Moderate
		Fibrosis	Moderate
		Mineralization	Mild
		Necrosis	Coagulative, Moderate
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 1-13			
Nose		Inflammation	Suppurative, Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Skin		Cyst Epithelial Inclusion	
	Subcut Tiss	Fibroma	
Note: [FIBROMA] TGLs = 4-10			
Note: [CYST EPITH INC] TGLs = 5-14			
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Moderate
Note: [ULCER] TGLs = 6-6			
Note: [ULCER] TGLs = 6-6			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 195

TRT#: 8

SEX: Female

DAY ON TEST: 729

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860435

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Kidney		Nephropathy	Mild
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Mild
		Inflammation	Chronic, Minimal
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 5-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 196

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860436

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
	Hepatocyte	Degeneration	Granular, Mild
		Inflammation	Chronic, Minimal
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			
Uterus		Hydrometra	Moderate
Note: [HYDROMETRA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 197

TRT#: 8

SEX: Female

DAY ON TEST: 686

DOSE: 100MG/KG

DISP: Dead

HISTO: 860437

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Ovary	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Heart		Mineralization	Mild
Kidney		Nephropathy	Moderate
Liver		Cytologic Alterations	Moderate
		Fibrosis	Mild
		Inflammation	Chronic, Mild
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Moderate
Pancreas	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Stomach	Forestomach	Ulcer	Moderate
Note: [ULCER] TGLs = 2-6			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 198

TRT#: 8

SEX: Female

DAY ON TEST: 651

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860438

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spinal Cord	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Cytologic Alterations	Moderate
		Developmental Malformation	
		Fatty Change	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Mild
		Necrosis	Coagulative, Minimal
Note: [DEVELOP MALFOR] TGLs = 1-2			
Mesentery	Fat	Inflammation	Chronic, Moderate
Note: [INFLAMMATION] TGLs = 6-13			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 2-4			
Stomach	Forestomach	Ulcer	Marked
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 3-13,4-13			
Note: [ULCER] TGLs = 5-13			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 199

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860439

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mesentery
Parathyroid Gland
Spleen
Thyroid Gland

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

OBSERVATIONS

Heart
Kidney
Liver

Note: [DEVELOP MALFOR] TGLs = 5-2,4-2
Mammary Gland
Note: [FIBROADENOMA] TGLs = 1-14
Vagina
Note: [LEIOMYOSAR] TGLs = 3-13

Cardiomyopathy
Nephropathy
Basophilic Focus
Developmental Malformation
Inflammation

Fibroadenoma

Leiomyosarcoma

Mild
Minimal

Chronic, Minimal

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 200

TRT#: 8

SEX: Female

DAY ON TEST: 734

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860440

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Spleen
Trachea

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Stomach - Forestomach
Urinary Bladder

Bone
Esophagus
Intestine Small - Duodenum
Lung
Nose
Salivary Glands
Stomach - Glandular
Uterus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Skin
Thymus

MISSING

Parathyroid Gland

OBSERVATIONS

Heart
Kidney
Liver

Cardiomyopathy
Nephropathy
Basophilic Focus
Degeneration
Squamous Cell Papilloma

Mild
Mild

Pharynx
Note: [PAPILOMA SQUA] TGLs = 2-13
Thyroid Gland
Note: [ADENOMA] TGLs = 1-9

Hepatocyte
C Cell

Adenoma

Granular, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 201

TRT#: 8

SEX: Female

DAY ON TEST: 734

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860441

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Ovary
Salivary Glands
Stomach - Glandular
Uterus

Bone
Esophagus
Intestine Small - Duodenum
Lung
Pancreas
Skin
Thymus

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Parathyroid Gland
Spleen
Thyroid Gland

Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Adrenal Gland
Heart
Kidney
Liver

Mammary Gland
Note: [FIBROADENOMA] TGLs = 1-13
Nose
Urinary Bladder
Note: [INFLAMMATION] TGLs = 2-5

Medulla

Hepatocyte
Bile Duct

Pheochromocytoma Benign
Cardiomyopathy
Nephropathy
Basophilic Focus
Degeneration
Hyperplasia
Inflammation
Fibroadenoma

Inflammation
Inflammation

Mild
Moderate

Granular, Mild
Minimal
Chronic, Minimal

Suppurative, Mild
Suppurative, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 202

TRT#: 8

SEX: Female

DAY ON TEST: 699

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860442

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Clitoral Gland	Esophagus	Heart
Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Ileum
Intestine Small - Jejunum	Islets, Pancreatic	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Ovary	Pancreas
Pituitary Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Intestine Small	Duodenum	Ulcer	Moderate
Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 2-1]			
Liver		Fibrosis	Minimal
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Marked
Stomach	Glandular	Ulcer	Moderate
Note: [ULCER] TGLs = 3-14			
Uterus		Hydrometra	Moderate
[Hydrometra TGLS = 1-13]		Polyp	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 203	TRT#: 8	SEX: Female	DAY ON TEST: 733
	DOSE: 100MG/KG	DISP: Terminal Sacrifice	HISTO: 860443

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver	Hepatocyte	Degeneration	Granular, Mild
	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Thyroid Gland	Follicular Cel	Carcinoma	
Uterus		Hydrometra	Mild

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 204

TRT#: 8

SEX: Female

DAY ON TEST: 699

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860444

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney	Renal Tubule	Adenoma	
		Nephropathy	Moderate
[Nephropathy TGLS = 3-1]			
Liver	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Minimal
Nose		Inflammation	Suppurative, Moderate
Ovary	Follicle	Cyst	Marked
Note: [CYST] TGLs = 1-5			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Uterus		Polyp	
Note: [POLYP] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 205

TRT#: 8

SEX: Female

DAY ON TEST: 734

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860445

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Mesentery	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Clitoral Gland		Carcinoma	
Note: [CARCINOMA] TGLs = 1-5			
Heart		Cardiomyopathy	Mild
Kidney	Renal Tubule	Adenoma	
		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Mild
	Bile Duct	Hyperplasia	Minimal
		Inflammation	Chronic, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Uterus		Hydrometra	Moderate
Note: [HYDROMETRA] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 206

TRT#: 8

SEX: Female

DAY ON TEST: 734

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860446

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Kidney
Liver

Hepatocyte

Nephropathy
Clear Cell Focus
Degeneration
Fatty Change
Inflammation

Mild
Granular, Mild
Minimal
Chronic, Minimal

Note: [FATTY CHANGE] TGLs = 1-2

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 207

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Stomach - Forestomach
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Skin
Thymus
Uterus

OBSERVATIONS

Heart
Kidney
Liver

Hepatocyte
Bile Duct

Cardiomyopathy
Nephropathy
Degeneration
Hyperplasia
Inflammation
Fungus

Mild
Mild
Granular, Mild
Minimal
Chronic, Minimal
Moderate

Nose

Note: FUNGUS IS ASPERGILLUS

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 208

TRT#: 8

SEX: Female

DAY ON TEST: 543

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Clitoral Gland	Esophagus	Intestine Large - Cecum
Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum
Intestine Small - Jejunum	Islets, Pancreatic	Lymph Node - Mandibular	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Stomach - Glandular	Thyroid Gland
Urinary Bladder	Uterus		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 6-7			
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver	Bile Duct	Hyperplasia	Mild
		Leukemia Mononuclear	
		Necrosis	Coagulative, Minimal
Note: [LEUKEMIA MONUC] TGLs = 1-13			
Lung		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 2-12			
Ovary		Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 4-2			
Stomach	Forestomach	Squamous Cell Papilloma	
Thymus		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-4			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 209

TRT#: 8

SEX: Female

DAY ON TEST: 629

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860449

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
Clitoral Gland	Esophagus	Intestine Large - Cecum	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lymph Node - Mandibular	Mammary Gland	Ovary
Parathyroid Gland	Pituitary Gland	Salivary Glands	Skin
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Bone Marrow		Leukemia Mononuclear	
Heart		Inflammation	Suppurative, Moderate
Kidney		Nephropathy	Mild
Liver		Cytologic Alterations	Mild
	Hepatocyte	Degeneration	Granular, Moderate
	Bile Duct	Fibrosis	Minimal
		Hyperplasia	Moderate
		Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 2-2			
Lung		Inflammation	Mild
Lymph Node	Mesenteric	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 3-14			
Note: [LEUKEMIA MONUC] TGLs = 4-14			
Mesentery		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 5-13			
Nose		Inflammation	Suppurative, Moderate
		Inflammation	Suppurative, Mild
Pancreas		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [LEUKEMIA MONUC] TGLs = 1-2			
Stomach	Forestomach	Ulcer	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 209

TRT#: 8

SEX: Female

DAY ON TEST: 629

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860449

ORGAN AND ACCOUNTABLE SITE STATUS

Glandular

Ulcer

Moderate

Note: [ULCER] TGLs = 7-6

Note: [ULCER] TGLs = 6-6

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 210

TRT#: 8

SEX: Female

DAY ON TEST: 679

DOSE: 100MG/KG

DISP: Dead

HISTO: 860450

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Brain	Clitoral Gland	Esophagus	Heart
Intestine Large - Rectum	Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Ovary	Parathyroid Gland	Salivary Glands	Skin
Spleen	Thymus	Thyroid Gland	Trachea
Urinary Bladder	Uterus		

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Pancreas
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OBSERVATIONS

Kidney		Nephropathy	Moderate
[Nephropathy TGLS = 2-1]			
Liver		Cytologic Alterations	Moderate
		Fatty Change	Mild
		Fibrosis	Mild
	Bile Duct	Hyperplasia	Minimal
		Necrosis	Coagulative, Moderate
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 1-14			
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 3-6			
Note: [ULCER] TGLs = 5-6			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 211

TRT#: 8

SEX: Female

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860451

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Spleen
Thyroid Gland

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Pituitary Gland
Stomach - Forestomach
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Skin
Thymus
Uterus

OBSERVATIONS

Heart
Kidney
Liver

Hepatocyte

Cardiomyopathy
Nephropathy
Degeneration
Fatty Change
Inflammation

Mild
Moderate
Granular, Minimal
Moderate
Chronic, Minimal

Note: [FATTY CHANGE] TGLs = 1-2

Nose

Inflammation

Suppurative, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 212

TRT#: 8

SEX: Female

DAY ON TEST: 580

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860452

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Lung
Nose
Pituitary Gland
Thymus
Uterus

Bone
Esophagus
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Trachea

OBSERVATIONS

Heart
Intestine Small
Kidney
Note: [NEPHROPATHY] TGLs = 2-1
Liver

Duodenum

Cardiomyopathy
Ulcer
Nephropathy

Mild
Mild
Marked

Note: [NECROSIS] TGLs = 1-2
Stomach

Forestomach
Glandular

Cytologic Alterations
Fatty Change
Fibrosis
Necrosis

Mild
Minimal
Mild
Coagulative, Moderate

Note: [ULCER] TGLs = 3-6
[Ulcer TGLS = 4-6]

Ulcer
Ulcer

Moderate
Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 213

TRT#: 8

SEX: Female

DAY ON TEST: 665

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860453

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Salivary Glands
Stomach - Glandular
Uterus

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Nose
Skin
Thymus

Bone
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Spleen
Trachea

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Stomach - Forestomach
Urinary Bladder

OBSERVATIONS

Clitoral Gland
Note: CLITORAL GLAND ON #6.

Heart
Kidney
Liver

Hepatocyte
Bile Duct

Mammary Gland
Note: [FIBROADENOMA] TGLs = 1-13

Parathyroid Gland
Pituitary Gland
Thyroid Gland

Pars Distalis
C Cell

Cardiomyopathy
Nephropathy
Basophilic Focus
Degeneration
Fatty Change
Hyperplasia
Fibroadenoma

Hyperplasia
Cyst
Hyperplasia

Mild
Minimal
Granular, Mild
Mild
Mild
Minimal
Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 214	TRT#: 8	SEX: Female	DAY ON TEST: 455
	DOSE: 100MG/KG	DISP: Interval Sacrifice	HISTO: 860454

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Moderate
Note: [FATTY CHANGE] TGLs = 1-2			
Lymph Node	Mandibular	Hyperplasia	Lymphoid, Moderate

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 215

TRT#: 8

SEX: Female

DAY ON TEST: 734

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860455

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Nose	Ovary
Pancreas	Parathyroid Gland	Pituitary Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney [Nephropathy TGLS = 4-1]		Nephropathy	Moderate
Liver [Developmental Malformation TGLS = 6-2]	Hepatocyte	Basophilic Focus Degeneration Developmental Malformation	Granular, Moderate
Mammary Gland Note: [FIBROADENOMA] TGLs = 2-13 Note: [FIBROADENOMA] TGLs = 1-13		Fibroadenoma Fibroadenoma	
Uterus [Polyp TGLS = 3-5]		Polyp	

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 216

TRT#: 8

SEX: Female

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860456

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Kidney
Liver

Hepatocyte

Bile Duct

Nephropathy
Degeneration
Fatty Change
Hyperplasia

Mild
Granular, Minimal
Mild
Minimal

Note: [FATTY CHANGE] TGLs = 1-2

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 217	TRT#: 8	SEX: Female	DAY ON TEST: 734
	DOSE: 100MG/KG	DISP: Terminal Sacrifice	HISTO: 860457

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Mild
		Mixed Cell Focus	
Pituitary Gland	Pars Distalis	Adenoma	
Skin		Cyst Epithelial Inclusion	

Note: [CYST EPITH INC] TGLs = 1-13

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 218

TRT#: 8

SEX: Female

DAY ON TEST: 733

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860458

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder	Uterus	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Marked
Note: [NEPHROPATHY] TGLs = 1-1			
Liver		Fatty Change	Marked
Note: [FATTY CHANGE] TGLs = 2-2			
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Tongue		Hyperkeratosis	Mild
Note: [HYPERKERATOSIS] TGLs = 4-14			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 219

TRT#: 8

SEX: Female

DAY ON TEST: 733

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860459

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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
Lung	Lymph Node - Mandibular	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		

OBSERVATIONS

Adrenal Gland	Cortex	Leukemia Mononuclear	
	Medulla	Leukemia Mononuclear	
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 1-1			
Liver	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Hyperplasia	Minimal
		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 220	TRT#: 8	SEX: Female	DAY ON TEST: 658
	DOSE: 100MG/KG	DISP: Moribund	HISTO: 860460

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mesenteric
Mammary Gland	Nose	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Thyroid Gland
Trachea			

MISSING

Lymph Node - Mandibular	Mesentery	Ovary	Pituitary Gland
Thymus	Urinary Bladder		

OBSERVATIONS

Clitoral Gland	Duct	Dilatation	Moderate
Note: [DILATATION] TGLs = 6-5			
Kidney		Nephropathy	Moderate
Note: [NEPHROPATHY] TGLs = 3-1			
Liver		Cytologic Alterations	Mild
		Fatty Change	Mild
		Fibrosis	Mild
		Necrosis	Coagulative, Minimal
Stomach	Forestomach	Ulcer	Moderate
	Glandular	Ulcer	Mild
Note: [ULCER] TGLs = 5-14			
Note: [ULCER] TGLs = 4-14			
Uterus		Hydrometra	Mild
Note: [HYDROMETRA] TGLs = 1-5			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 221

TRT#: 8

SEX: Female

DAY ON TEST: 491

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860461

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Kidney
Liver

Hepatocyte

Nephropathy
Basophilic Focus
Degeneration
Fatty Change
Fibroma

Minimal
Granular, Mild
Mild

Tissue NOS

Note: [FIBROMA] TGLs = 1-13

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 222

TRT#: 8

SEX: Female

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860462

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Ovary
Salivary Glands
Stomach - Glandular
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Pancreas
Skin
Thymus
Uterus

Bone
Esophagus
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Parathyroid Gland
Spleen
Thyroid Gland

Bone Marrow
Heart
Intestine Small - Duodenum
Lung
Nose
Pituitary Gland
Stomach - Forestomach
Trachea

OBSERVATIONS

Kidney
Liver

Hepatocyte

Bile Duct

Nephropathy
Basophilic Focus
Degeneration
Fatty Change
Hyperplasia
Inflammation

Minimal

Granular, Minimal
Mild
Minimal
Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 223

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860463

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Ovary	Pancreas	Parathyroid Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Trachea	Urinary Bladder	Uterus

INSUFFICIENT TISSUE

Thymus

OBSERVATIONS

Eye	Antr Chamber	Edema	Moderate
	Cornea	Edema	Mild
Note: [EDEMA] TGLs = 1-13			
Note: [EDEMA] TGLs = 2-13			
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Mild
		Fibroadenoma	
Mammary Gland			
Note: [FIBROADENOMA] TGLs = 3-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 224

TRT#: 8

SEX: Female

DAY ON TEST: 733

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860464

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric
Nose	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	Uterus

OBSERVATIONS

Bone		Fracture	
Note: [FRACTURE] TGLs = 4-14			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver	Hepatocyte	Degeneration	Granular, Moderate
Mammary Gland		Adenocarcinoma	
Note: [ADENOCARC] TGLs = 1-13			
Ovary	Follicle	Cyst	Moderate
Note: [CYST] TGLs = 2-5			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 225

TRT#: 8

SEX: Female

DAY ON TEST: 456

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860465

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Fatty Change	Mild
Pituitary Gland	Pars Distalis	Cyst	Mild
Uterus		Polyp	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 226

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860466

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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			

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Moderate
	Bile Duct	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Adenoma	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 227

TRT#: 8

SEX: Female

DAY ON TEST: 733

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860467

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	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			

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Mild
		Inflammation	Chronic, Minimal
Pharynx		Squamous Cell Papilloma	
Note: [PAPILLOMA SQUA] TGLs = 1-13			
Pituitary Gland	Pars Distalis	Cyst	

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 228

TRT#: 8

SEX: Female

DAY ON TEST: 463

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860468

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung
Lymph Node - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Salivary Glands
Skin	Spleen	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Brain Note: [COMPRESSION] TGLs = 2-7	Hypothalamus	Compression	Marked
Kidney		Nephropathy	Minimal
Pituitary Gland [Adenoma TGLS = 1-5]	Pars Distalis	Adenoma	
Uterus		Hydrometra	Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 229

TRT#: 8

SEX: Female

DAY ON TEST: 455

DOSE: 100MG/KG

DISP: Interval Sacrifice

HISTO: 860469

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular	Lymph Node - Mesenteric	Mammary Gland	Nose
Ovary	Pancreas	Parathyroid Gland	Pituitary Gland
Salivary Glands	Skin	Spleen	Stomach - Forestomach
Stomach - Glandular	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

MISSING

Thymus

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Developmental Malformation	
		Fatty Change	Mild

Note: [DEVELOP MALFOR] TGLs = 1-2

Note: [FATTY CHANGE] TGLs = 2-2

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 230	TRT#: 8	SEX: Female	DAY ON TEST: 641
	DOSE: 100MG/KG	DISP: Dead	HISTO: 860470

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Bone Marrow
Esophagus	Heart	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Nose	Ovary	Parathyroid Gland
Salivary Glands	Skin	Thyroid Gland	Trachea
Uterus			

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum	Intestine Small - Duodenum
Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic	Pancreas
Spleen	Stomach - Forestomach	Stomach - Glandular	Urinary Bladder

OBSERVATIONS

Brain	Hypothalamus	Compression	Moderate
Note: [COMPRESSION] TGLs = 5-7			
Clitoral Gland		Inflammation	Suppurative, Moderate
Note: [INFLAMMATION] TGLs = 1-5			
Kidney		Nephropathy	Minimal
Liver		Necrosis	Coagulative, Minimal
Mammary Gland		Fibroadenoma	
Note: [FIBROADENOMA] TGLs = 2-13,3-14			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 4-4			
Thymus		Congestion	Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 231

TRT#: 8

SEX: Female

DAY ON TEST: 734

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860471

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Clitoral Gland		Adenoma	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Minimal
		Inflammation	Chronic, Minimal
Mesentery	Fat	Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 3-13			
Pituitary Gland	Pars Distalis	Adenoma	
Uterus		Polyp	
Note: [POLYP] TGLs = 2-5			

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 232	TRT#: 8	SEX: Female	DAY ON TEST: 733
	DOSE: 100MG/KG	DISP: Terminal Sacrifice	HISTO: 860472

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver	Hepatocyte	Basophilic Focus	
		Degeneration	Granular, Mild
		Eosinophilic Focus	
		Inflammation	Chronic, Minimal
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 3-4			
Skin		Squamous Cell Carcinoma	
Note: [SQUAM CEL CARC] TGLs = 1-13			
Uterus		Hydrometra	Moderate
Note: [HYDROMETRA] TGLs = 2-5			
Vagina		Hyperkeratosis	Marked
Note: [HYPERKERATOSIS] TGLs = 4-15			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 233

TRT#: 8

SEX: Female

DAY ON TEST: 732

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860473

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Lymph Node - Mesenteric
Parathyroid Gland
Stomach - Forestomach
Urinary Bladder

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Islets, Pancreatic
Mammary Gland
Salivary Glands
Stomach - Glandular

Bone
Esophagus
Intestine Small - Duodenum
Lung
Ovary
Skin
Thyroid Gland

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mandibular
Pancreas
Spleen
Trachea

MISSING

Thymus

OBSERVATIONS

Heart
Kidney
Liver
 Note: [INFLAMMATION] TGLs = 2-2
Nose
Pituitary Gland
 Note: [ADENOMA] TGLs = 1-4
Uterus

Pars Distalis

Cardiomyopathy
Nephropathy
Inflammation

Inflammation
Adenoma

Polyp

Mild
Moderate
Chronic, Mild

Suppurative, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 234	TRT#: 8	SEX: Female	DAY ON TEST: 619
	DOSE: 100MG/KG	DISP: Dead	HISTO: 860474

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
Clitoral Gland	Esophagus	Heart	Intestine Large - Colon
Intestine Large - Rectum	Intestine Small - Duodenum	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Ovary	Parathyroid Gland
Salivary Glands	Skin	Stomach - Forestomach	Stomach - Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder
Uterus			

AUTO PRECLUDES DIAG.

Bone Marrow	Intestine Large - Cecum	Intestine Small - Ileum	Intestine Small - Jejunum
Islets, Pancreatic	Pancreas		

OBSERVATIONS

Kidney		Nephropathy	Mild
Liver	Hepatocyte	Cytologic Alterations	Minimal
		Fibrosis	Mild
		Necrosis	Coagulative, Mild
Note: [NECROSIS] TGLs = 2-2			
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ADENOMA] TGLs = 1-4			
Spleen		Pigmentation	Hemosiderin, Moderate

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 235

TRT#: 8

SEX: Female

DAY ON TEST: 729

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860475

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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	Lung	Lymph Node - Mandibular	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

OBSERVATIONS

Clitoral Gland		Inflammation	Suppurative, Marked
Note: [INFLAMMATION] TGLs = 1-13			
Heart		Cardiomyopathy	Mild
		Fibrosis	Mild
Kidney	Cortex	Cyst	Mild
		Nephropathy	Moderate
Note: [CYST] TGLs = 2-1			
Liver	Hepatocyte	Degeneration	Granular, Minimal
		Inflammation	Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 236

TRT#: 8

SEX: Female

DAY ON TEST: 642

DOSE: 100MG/KG

DISP: Dead

HISTO: 860476

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Medulla	Bone	Bone Marrow	Brain
Esophagus	Heart	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Islets, Pancreatic	Lung	Lymph Node - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Nose	Ovary
Pancreas	Parathyroid Gland	Salivary Glands	Skin
Spleen	Stomach - Forestomach	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

AUTO PRECLUDES DIAG.

Intestine Large - Cecum	Intestine Small - Ileum	Intestine Small - Jejunum	Stomach - Glandular
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OBSERVATIONS

Adrenal Gland	Cortex	Clear Cell Focus	Mild
Clitoral Gland		Carcinoma	
Note: [CARCINOMA] TGLs = 1-5			
Kidney		Nephropathy	Minimal
		Sarcoma	
Liver		Fibrosis	Minimal
		Necrosis	Coagulative, Moderate
[Necrosis TGLS = 5-2]			
Mesentery		Sarcoma	
Note: [SARCOMA] TGLs = 3-13			
Pituitary Gland	Pars Distalis	Adenoma	
Uterus		Sarcoma	
Vagina		Sarcoma	
Note: SARCOMA APPEARS TO BE A ROUND CELL TYPE. IT INVOLVES			
Note: MESENTERIC SURFACE OF MANY ORGANS BUT DOES NOT INVADE			
Note: ORGAN CAPSULE.			
[Sarcoma TGLS = 4-14]			

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 237

TRT#: 8

SEX: Female

DAY ON TEST: 693

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860477

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	Bone	Brain
Esophagus	Intestine Large - Cecum	Intestine Large - Colon	Intestine Large - Rectum
Intestine Small - Duodenum	Intestine Small - Ileum	Intestine Small - Jejunum	Islets, Pancreatic
Lung	Lymph Node - Mandibular	Lymph Node - Mesenteric	Nose
Ovary	Pancreas	Parathyroid Gland	Pituitary Gland
Salivary Glands	Skin	Stomach - Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Bone Marrow		Myelofibrosis	Moderate
Clitoral Gland		Adenoma	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Cytologic Alterations	Minimal
		Fibrosis	Minimal
	Bile Duct	Hyperplasia	Moderate
		Necrosis	Coagulative, Minimal
Note: [NECROSIS] TGLs = 6-2			
Lymph Node	Mediastinal	Hyperplasia	Macrophage, Mild
Note: [HYPERPLASIA] TGLs = 7-4			
Mammary Gland		Galactocele	Moderate
Note: [GALACTOCELE] TGLs = 1-15			
Mesentery	Fat	Inflammation	Chronic, Moderate
	Fat	Necrosis	Coagulative, Marked
Note: [NECROSIS] TGLs = 4-17			
Note: [INFLAMMATION] TGLs = 9-6			
Spleen		Congestion	Marked
Note: [CONGESTION] TGLs = 3-13			
Stomach	Forestomach	Ulcer	Marked
Note: [ULCER] TGLs = 8-6			
Uterus	Epithelium	Cytoplasmic Alteration	Marked

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 237

TRT#: 8

SEX: Female

DAY ON TEST: 693

DOSE: 100MG/KG

DISP: Moribund

HISTO: 860477

ORGAN AND ACCOUNTABLE SITE STATUS

Hydrometra

Moderate

[Hydrometra TGLS = 5-14]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01

Test Type: CHRONIC

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Coumarin

CAS Number: 91-64-5

Date Report Requested: 10/19/2014

Time Report Requested: 03:39:35

First Dose M/F: NA / NA

Lab: AM BIO

ANIMAL ID: 238

TRT#: 8

SEX: Female

DAY ON TEST: 729

DOSE: 100MG/KG

DISP: Terminal Sacrifice

HISTO: 860478

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex
Brain
Intestine Large - Colon
Intestine Small - Jejunum
Ovary
Skin
Thymus

Adrenal Gland - Medulla
Clitoral Gland
Intestine Large - Rectum
Lung
Pancreas
Spleen
Trachea

Bone
Esophagus
Intestine Small - Duodenum
Lymph Node - Mandibular
Parathyroid Gland
Stomach - Forestomach
Urinary Bladder

Bone Marrow
Intestine Large - Cecum
Intestine Small - Ileum
Lymph Node - Mesenteric
Salivary Glands
Stomach - Glandular
Uterus

OBSERVATIONS

Heart
Islets, Pancreatic
Kidney
Liver

Mammary Gland

Hepatocyte
Bile Duct

Cardiomyopathy
Adenoma
Nephropathy
Degeneration
Hyperplasia
Fibroadenoma
Fibroadenoma

Mild

Mild
Granular, Mild
Minimal

Note: [FIBROADENOMA] TGLs = 1-14
Note: [FIBROADENOMA] TGLs = 2-13

Nose
Pituitary Gland
Note: [ADENOMA] TGLs = 3-4
Thyroid Gland

Pars Distalis

C Cell

Inflammation
Adenoma

Hyperplasia

Suppurative, Minimal

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 239	TRT#: 8	SEX: Female	DAY ON TEST: 551
	DOSE: 100MG/KG	DISP: Moribund	HISTO: 860479

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular
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

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
	Hepatocyte	Degeneration	Granular, Minimal
	Bile Duct	Hyperplasia	Minimal
		Mixed Cell Focus	
Lung	Alveolar Epith	Hyperplasia	Mild
Mammary Gland		Fibroadenoma	

Note: [FIBROADENOMA] TGLs = 1-13

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 05090-01
Test Type: CHRONIC
Route: GAVAGE
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Coumarin
CAS Number: 91-64-5

Date Report Requested: 10/19/2014
Time Report Requested: 03:39:35
First Dose M/F: NA / NA
Lab: AM BIO

ANIMAL ID: 240	TRT#: 8	SEX: Female	DAY ON TEST: 733
	DOSE: 100MG/KG	DISP: Terminal Sacrifice	HISTO: 860480

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Gland - Cortex	Adrenal Gland - Medulla	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 - Mandibular
Lymph Node - Mesenteric	Mammary Gland	Ovary	Pancreas
Parathyroid Gland	Salivary Glands	Skin	Spleen
Stomach - Forestomach	Stomach - Glandular	Thymus	Trachea
Urinary Bladder			

OBSERVATIONS

Kidney		Nephropathy	Moderate
Liver		Clear Cell Focus	
Lung	Alveolus	Inflammation	Chronic, Minimal
Nose		Inflammation	Suppurative, Mild
Pituitary Gland	Pars Distalis	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Minimal
Uterus		Hyperplasia	Cystic, Mild

PRIMARY CAUSE OF DEATH -

**** END OF REPORT ****