

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

**C Number:** C62204  
**Lock Date:** Not Entered.  
**Cage Range:** All  
**Date Range:** All  
**Reasons For Removal:** All  
**Removal Date Range:** All  
**Treatment Groups:** All  
**Study Gender:** Male  
**PWG Approval Date:** 01/13/1992

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

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Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 1	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892408

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Adrenal Cortex	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	Nose
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

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**MISSING**

Adrenal Medulla

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**OBSERVATIONS**

Blood		Leukemia Mononuclear	
Esophagus		Carcinoma	Metastatic (Uncertain Primary Site)
Note: [ CARCINOMA ] TGLs = 5-2.1			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Note: TRANSITIONAL CELL HYPERPLASIA			
Liver		Basophilic Focus	
		Carcinoma	Metastatic (Uncertain Primary Site)
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-6,6-6			
Lung		Leukemia Mononuclear	
Pancreas	Acinus	Hyperplasia	Minimal
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-3,2-3			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 2	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892409

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Nose	Parathyroid Gland
Pituitary Gland	Skeletal Muscle	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

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**OBSERVATIONS**

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 7-6+6.1			
Note: [ BASOPH FOCUS ] TGLs = 6-6+6.1			
Pancreas	Acinus	Atrophy	Moderate
	Acinus	Hyperplasia	Moderate
Preputial Gland		Dilatation	Moderate
Note: [ DILATATION ] TGLs = 10-10			
Prostate		Hyperplasia	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Seminal Vesicle		Depletion Cellular	Moderate
Note: [ DEPLETION ] TGLs = 4-7.1			
Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-14+14.1 ]			
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-3			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 3

TRT#: 1

SEX: Male

DAY ON TEST: 635

DOSE: 0 ML/KG

DISP: Natural Death

HISTO: 892410

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Stomach, Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Fatty Change	Focal, Minimal
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1			
Note: [ FATTY CHANGE ] TGLs = 3-6.1			
Lung	Alveolar Epith	Hyperplasia	Mild
Note: [ HYPERPLASIA ] TGLs = 5-3.2,7-3.2			
Nose		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Moderate
Note: [ ATROPHY ] TGLs = 9-9.1			
Preputial GI			
Note: WITHIN NORMAL LIMITS ON MICRO EXAM.			
Skin		Squamous Cell Papilloma	
Note: [ SQ CL PAPILOM ] TGLs = 6-14			
Spleen		Fibrosis	Moderate
Note: [ FIBROSIS ] TGLs = 2-3			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 3	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 635 <b>HISTO:</b> 892410
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<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
Stomach, Forestomach		Ulcer	Minimal
Testes [ Adenoma TGLS = 1-7 ]	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland Note: [ ADENOMA ] TGLs = 4-3	Follicular Cel	Adenoma	

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<b>PRIMARY CAUSE OF DEATH</b>	-
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 4

TRT#: 1

SEX: Male

DAY ON TEST: 641

DOSE: 0 ML/KG

DISP: Natural Death

HISTO: 892411

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Epididymis
Esophagus	Mammary Gland	Nose	Parathyroid Gland
Pituitary Gland	Salivary Glands	Skeletal Muscle	Skin
Stomach, Forestomach	Trachea		

AUTO PRECLUDES DIAG.

Bone Marrow	Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum
Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum	Islets, Pancreatic
Stomach, Glandular	Thyroid Gland		

OBSERVATIONS

Brain		Leukemia Mononuclear	
Heart		Cardiomyopathy	Moderate
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 13-4,14-4		
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 9-6,15-6		
Lung		Leukemia Mononuclear	
Lymph Node	Axillary	Leukemia Mononuclear	
	Iliac	Leukemia Mononuclear	
	Lumbar	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 5-8.1,8-18,17-18,10-16,12-3		
Note: [ LEUKEMIA MONUC ]	TGLs = 1-9,2-17,3-17,4-17,		
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 5-8.1,8-18,17-18,10-16,12-3		
Note: [ LEUKEMIA MONUC ]	TGLs = 1-9,2-17,3-17,4-17,		
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 5-8.1,8-18,17-18,10-16,12-3		
Note: [ LEUKEMIA MONUC ]	TGLs = 1-9,2-17,3-17,4-17,		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 4	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 641 <b>HISTO:</b> 892411
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pancreas		Leukemia Mononuclear	
Preputial Gland		Leukemia Mononuclear	
Prostate		Leukemia Mononuclear	
Seminal Vesicle		Leukemia Mononuclear	
Spleen		Infarct	Marked
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-3.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 7-7,16-7			
Thymus		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 11-3			
Urinary Bladder		Leukemia Mononuclear	

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**PRIMARY CAUSE OF DEATH** -

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Animal Note: MOST OF THE TISSUES AUTOLYZED

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Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

<b>ANIMAL ID:</b> 5	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 627 <b>HISTO:</b> 892412
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Brain	Epididymis
Esophagus	Parathyroid Gland	Skeletal Muscle	Skin
Stomach, Glandular	Trachea	Urinary Bladder	

MISSING

Mammary Gland			
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OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Intestine Large, Cecum	Lymphoid Tiss	Leukemia Mononuclear	
Intestine Large, Colon	Lymphoid Tiss	Leukemia Mononuclear	
Intestine Large, Rectum	Lymphoid Tiss	Leukemia Mononuclear	
Intestine Small, Duodenum	Lymphoid Tiss	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 14-5.1		
Intestine Small, Ileum	Lymphoid Tiss	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 14-5.1		
Intestine Small, Jejunum	Lymphoid Tiss	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 14-5.1		
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
Note: [ LEUKEMIA MONUC ]	TGLs = 7-4+4.1,8-4+4.1		
Liver		Fatty Change	Focal, Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 9-6		
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 2-9,6-8.1,10-3		
Lymph Node, Mandibular		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 5	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 627
	<b>DOSE:</b> 0 ML/KG	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 892412

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ LEUKEMIA MONUC ] TGLs = 2-9,6-8.1,10-3			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-9,6-8.1,10-3			
Mesentery		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 12-3.1			
Nose		Fungus	
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas		Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ ADENOMA ] TGLs = 11-8			
Preputial Gland		Dilatation	Marked
Note: [ DILATATION ] TGLs = 1-10			
Prostate		Leukemia Mononuclear	
Salivary Glands		Leukemia Mononuclear	
Seminal Vesicle		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-3.1,13-3.1			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Mild
		Ulcer	Moderate
Note: [ ULCER ] TGLs = 5-5			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			
Note: [ ADENOMA ] TGLs = 3-7			
Thymus		Leukemia Mononuclear	
Thyroid Gland		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 647 <b>HISTO:</b> 892413
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ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Thymus

OBSERVATIONS

Blood		Leukemia Mononuclear	
Heart		Thrombosis	Mild
Kidney	Renal Tubule	Degeneration	Mild
		Nephropathy	Mild
Note: [ DEGEN ] TGLs = 6-4			
Liver		Fatty Change	Focal, Mild
		Leukemia Mononuclear	
Note: [ FATTY CHANGE ] TGLs = 4-6			
Note: PIGMENT			
Lung		Leukemia Mononuclear	
Pituitary Gland	Pars Distalis	Angiectasis	Mild
	Pars Distalis	Hyperplasia	Mild
Note: [ ANGIECTASIS ] TGLs = 5-8			
Spleen		Leukemia Mononuclear	
Note: PIGMENT			
Stomach, Forestomach		Hyperkeratosis	Mild
		Hyperplasia	Basal Cell, Mild
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 6

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 647

**DOSE:** 0 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892413

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 476 <b>HISTO:</b> 892414
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ORGAN AND ACCOUNTABLE SITE STATUS

**NORMAL**

Adrenal Cortex	Adrenal 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	Liver	Lymph Node, Mandibular	Lymph Node, Mesenteric
Pancreas	Parathyroid Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Urinary Bladder			

**MISSING**

Mammary Gland

**OBSERVATIONS**

Brain		Congestion	Mild
Note: [ CONGESTION ] TGLs = 6-1			
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Minimal
Lung		Hemorrhage	Moderate
Note: [ HEMORRHAGE ] TGLs = 5-2+3			
Nose		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Marked
Note: FRUITY BODIES			
Pancreas			
Note: DEPLETION OF ZYMOGEN GRANULES			
Preputial Gland		Dilatation	Mild
Note: [ DILATATION ] TGLs = 1-10			
Spleen		Depletion Lymphoid	Marked
Note: [ DEPLET LYMPH ] TGLs = 3-3			
Testes	Interstit Cell	Adenoma	
	Seminif Tub	Atrophy	Marked
Note: [ ADENOMA ] TGLs = 7-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 476 <b>HISTO:</b> 892414
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ATROPHY ] TGLs = 2-7 Trachea	Lumen	Thrombosis	Moderate
Note: [ THROMBUS ] TGLs = 4-2 Note: BLOOD IN TRACHEA			

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PRIMARY CAUSE OF DEATH -

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Animal Note: TGL#8 NORMAL MUCOSAL FOLDS

Animal Note: MANY ORGANS ATROPHIED

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Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 8	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 462
	<b>DOSE:</b> 0 ML/KG	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> 881423

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Lung			
Note: CONGESTION			
Pancreas	Acinus	Atrophy	Mild
Preputial Gland		Abscess	Mild
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: HYPERPLASIA IN ONE TESTIS			
[ Hyperplasia TGLS = 1-7.1 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 9	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Scheduled Sacrifice	<b>DAY ON TEST:</b> 462 <b>HISTO:</b> 881424
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Adrenal 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	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Stomach, Forestomach	Stomach, Glandular	Thymus	Trachea
Urinary Bladder			

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**OBSERVATIONS**

Adrenal Medulla		Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 1-8			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Nose			
Note: BLOOD IN NASAL CAVITY			
Pancreas	Acinus	Atrophy	Minimal
Spleen		Leukemia Mononuclear	
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 462

DOSE: 0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881425

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Islets Panc			
Note: LARGE ISLETS OR HYPERPLASIA			
Kidney		Nephropathy	Minimal
Lymph Node	Mediastinal	Angiectasis	Mild
	Mediastinal	Pigmentation	Mild
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland			
Note: DEGRANULATED CELLS			
Preputial Gland		Abscess	Mild
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: HYPERPLASIA IN ONE TESTIS			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 11

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892415

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Nose	Parathyroid Gland	Preputial Gland
Prostate	Salivary Glands	Skeletal Muscle	Skin
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Thymus

OBSERVATIONS

Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Mild
Note: [ PHEOCHROM BGN ] TGLs = 5-8			
Heart		Cardiomyopathy	Mild
Kidney		Glomerulosclerosis Nephropathy Pigmentation	Moderate Moderate Mild
Note: YELLOW PIGMENT			
Liver		Basophilic Focus Clear Cell Focus Eosinophilic Focus Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-6			
Note: [ BASOPH FOCUS ] TGLs = 11-6+6.1,12-6+6.1			
Lymph Node	Mediastinal Pancreatic	Pigmentation Pigmentation	Mild Mild
Note: [ PIGMENT ] TGLs = 13-9.1			
Pancreas	Acinus	Atrophy	Moderate
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ ADENOMA ] TGLs = 9-8			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 11

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892415

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Saliv Glands

Note: PIGMENT

Seminal Vesicle

Note: [ DEPLETION ] TGLs = 10-7.1

Spleen

Note: [ INFARCT ] TGLs = 3-3.2,4-3.2

[ Leukemia Mononuclear TGLS = 2-3.1+3.2 ]

Stomach, Forestomach

Testes

Note: [ ADENOMA ] TGLs = 8-7

Bilateral, Interstit Cell

Depletion Cellular

Marked

Infarct

Mild

Leukemia Mononuclear

Hyperplasia

Basal Cell, Minimal

Adenoma

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**PRIMARY CAUSE OF DEATH**

-

Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

Animal Note: NOT IN SAME GLAND

Animal Note: TGL#6 NODULE REPRESENTS NORMAL LYMPHOID TISSUE

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 12

TRT#: 1

SEX: Male

DAY ON TEST: 715

DOSE: 0 ML/KG

DISP: Natural Death

HISTO: 892416

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Small, Duodenum
Islets, Pancreatic	Lymph Node, Mandibular	Mammary Gland	Nose
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Thyroid Gland	Trachea		

**MISSING**

Thymus

**AUTO PRECLUDES DIAG.**

Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Ileum
Intestine Small, Jejunum	Urinary Bladder		

**OBSERVATIONS**

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Note: [ NEPHROPATHY ] TGLs = 13-4			
Liver		Necrosis	Marked
Note: [ NECROSIS ] TGLs = 6,8-6			
Lung		Infiltration Cellular	Histiocyte, Mild
[ Infiltration Cellular TGLS = 7-2+2.1+3. ]			
Lymph Node	Mediastinal	Hemorrhage	Moderate
Note: [ HEMORRHAGE ] TGLs = 9-3			
Lymph Node, Mesenteric		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 4-8			
Note: MESENTERIC LN: MORE LIKE AN ABSCESS			
Pancreas	Acinus	Atrophy	Mild
Spleen		Fibrosis	Mild
Note: [ FIBROSIS ] TGLs = 3-3.1,10-3.1			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Stomach, Glandular		Erosion	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 12

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 715

**DOSE:** 0 ML/KG

**DISP:** Natural Death

**HISTO:** 892416

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ EROSION ] TGLs = 11-5+5.1,12-5+5.1

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 13

TRT#: 1

SEX: Male

DAY ON TEST: 461

DOSE: 0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881426

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Mammary Gland Skin

OBSERVATIONS

Heart		Cardiomyopathy Leukemia Mononuclear	Mild
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Nephropathy	Mild
Liver		Leukemia Mononuclear	
Pancreas	Acinus	Atrophy	Mild
	Acinus	Fibrosis	Mild
	Acinus	Hyperplasia	Mild
Note: FIBROBLASTS AND DUCTS CLOSE TOGETHER			
Note: BECAUSE OF ACINAR ATROPHY			
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Note: DEGRANULATED CELLS			
Spleen		Leukemia Mononuclear	
Note: CONGESTION AND PIGMENT			
Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 14

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892477

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal 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	Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric
Preputial Gland	Prostate	Salivary Glands	Skeletal Muscle
Skin	Stomach, Forestomach	Stomach, Glandular	Urinary Bladder

MISSING

Esophagus	Mammary Gland	Parathyroid Gland	Thymus
Thyroid Gland	Trachea		

OBSERVATIONS

Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
		Leukemia Mononuclear	
Nose		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
Note: [ ADENOMA ] TGLs = 5-8			
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 3-7.1			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-3 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 14

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892477

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 15

TRT#: 1

SEX: Male

DAY ON TEST: 462

DOSE: 0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881427

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal 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
Lymph Node, Mesenteric	Mammary Gland	Nose	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
Intestine Large, Colon		Ulcer	Mild
Kidney		Nephropathy	Minimal
Mesentery	Fat	Inflammation	Chronic Active, Moderate
[ Inflammation TGLS = 1-13 ]			
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Cyst	
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 16

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892418

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland
Parathyroid Gland	Pituitary Gland	Prostate	Seminal Vesicle
Skeletal Muscle	Skin	Spleen	Stomach, Forestomach
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Thymus

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
Lymph Node	Pancreatic	Infiltration Cellular	Histiocyte, Moderate
Note: [ INFILTRAT CELL ] TGLs = 3-9.1			
Nose		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Mild
Preputial Gland		Dilatation	Mild
Note: [ DILATATION ] TGLs = 1-10			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 17

TRT#: 1

SEX: Male

DAY ON TEST: 708

DOSE: 0 ML/KG

DISP: Natural Death

HISTO: 892419

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large, Rectum	Intestine Small, Duodenum
Islets, Pancreatic	Lung	Lymph Node, Mesenteric	Mammary Gland
Nose	Pituitary Gland	Preputial Gland	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Parathyroid Gland	Prostate	Thymus
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AUTO PRECLUDES DIAG.

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

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Note: [ CARDIOMYOPATHY ] TGLs = 11-13			
Kidney		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: NO MICRO REASON FOR SMALL LIVER TGL#8			
Note: [ LEUKEMIA MONUC ] TGLs = 9-6.1			
Lymph Node, Mandibular		Infiltration Cellular	Plasma Cell, Moderate
Note: [ INFILTRAT CELL ] TGLs = 3-9			
Pancreas	Acinus	Atrophy	Minimal
Spleen		Atrophy	Moderate
		Depletion Lymphoid	Marked
		Leukemia Mononuclear	
Note: [ DEPLET LYMPH ] TGLs = 7-3			
Stomach, Forestomach		Hyperplasia	Basal Cell, Mild
Stomach, Glandular		Erosion	Minimal
Note: [ EROSION ] TGLs = 10-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 5-7,6-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 17

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 708

**DOSE:** 0 ML/KG

**DISP:** Natural Death

**HISTO:** 892419

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Tooth

Odontoma

Note: TGL#2 INCISOR TOOTH NORMAL ON MICRO EXAM

Note: [ ODONTOMA ] TGLs = 4-14

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 18

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892420

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Note: BOTH ACINAR AND ISLET CELLS			
Kidney		Cyst	
		Nephropathy	Minimal
[ Cyst TGLS = 1-4 ]			
Liver		Basophilic Focus	
		Cyst	
		Necrosis	Mild
Note: [ CYST ] TGLs = 6-6.1			
Nose		Fungus	Mild
		Hyperkeratosis	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Note: HYPERKERATOSIS AND METAPLASIA IN OROPHARYNX			
Pancreas	Acinus	Atrophy	Minimal
Preputial Gland		Dilatation	Moderate
		Inflammation	Acute, Mild
Note: [ DILATATION ] TGLs = 5-10			
Saliv Glands			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 18

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892420

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: EOSINOPHILS IN THE GLAND

Spleen

Hematopoietic Cell Proliferation

Moderate

Stomach, Forestomach

Hyperplasia

Basal Cell, Minimal

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 3-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 19

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892421

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lymph Node, Mandibular	Lymph Node, Mesenteric
Mammary Gland	Parathyroid Gland	Pituitary Gland	Prostate
Salivary Glands	Skeletal Muscle	Skin	Spleen
Stomach, Glandular	Thymus	Trachea	Urinary Bladder

OBSERVATIONS

Eye	Lens	Cataract	Moderate
Note: [ CATARACT ] TGLs = 2-14			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Hyperplasia	Focal, Moderate
Note: [ HDN ] TGLs = 6-6.1			
Note: [ HYPERPLASIA ] TGLs = 7-6.2			
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1+6.3,9-6+6.1+6.3			
Lung		Alveolar/Bronchiolar Adenoma	
		Hemorrhage	Mild
[ Alveolar/Bronchiolar Adenoma TGLS = 11-3 ]			
[ Hemorrhage TGLS = 10-2 ]			
Nose		Foreign Body	Mild
		Fungus	Mild
		Inflammation	Acute, Mild
Note: PLANT MATERIAL			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal
Preputial Gland		Dilatation	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 19

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892421

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ DILATATION ] TGLs = 1-10			
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 5-7.1			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7,4-7			
Thyroid Gland	C Cell	Adenoma	
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 20

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892422

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large, Cecum	Intestine Large, Colon
Intestine Large, Rectum	Intestine Small, Ileum	Islets, Pancreatic	Lymph Node, Mesenteric
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Note: [ HYPERPLASIA ] TGLs = 9-9			
Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Intestine Small, Duodenum	Mucosa	Hyperplasia	Diffuse, Marked
Note: [ HYPERPLASIA ] TGLs = 4-5			
Note: [ HYPERPLASIA ] TGLs = 4-5			
Intestine Small, Jejunum	Mucosa	Hyperplasia	Diffuse, Moderate
Note: [ HYPERPLASIA ] TGLs = 4-5			
Note: [ HYPERPLASIA ] TGLs = 4-5			
Kidney		Cyst	
		Nephropathy	Moderate
Note: [ CYST ] TGLs = 8-4			
[ Cyst TGLS = 7-4+4.1 ]			
Liver		Basophilic Focus	
		Clear Cell Focus	
		Cyst	
		Eosinophilic Focus	
		Hepatocellular Carcinoma	
		Leukemia Mononuclear	
Note: [ HEPATOCLR CARC ] TGLs = 12-6.1+6.2+6.3,14-6.1+6.2+6.3			
Note: [ BASOPH FOCUS ] TGLs = 11-6+6.2+6.4			

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 20

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892422

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ CYST ] TGLs = 13-6.1			
Note: [ LEUKEMIA MONUC ] TGLs = 10-6+6.1+6.2+6.3			
Lung		Congestion	Marked
Note: [ CONGESTION ] TGLs = 16-2+3			
Lymph Node, Mandibular		Infiltration Cellular	Plasma Cell, Moderate
Mammary Gland		Fibroadenoma	Multiple
Note: [ FIBROADENOMA ] TGLs = 1-10+14			
Nose		Fungus	Mild
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Minimal
Sem Ves			
Note: NORMAL ON MICRO EXAM.			
Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
Note: [ FIBROSIS ] TGLs = 6-3.2			
Note: [ LEUKEMIA MONUC ] TGLs = 5-3.1+3.2			
Stom Gland			
Note: NO MICRO REASON FOR FOCUS TGL18, GLANDULAR.			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			
Urin Bladder			
Note: TGL#17 WALL THICK BECAUSE NOT INFLATED.			

PRIMARY CAUSE OF DEATH

-

Animal Note: TGL#15 NO MICRO REASON FOR ENLARGEMENT.

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 21

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892423

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Pancreas	Pituitary Gland
Prostate	Salivary Glands	Skeletal Muscle	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Note: [ NEPHROPATHY ] TGLs = 8-4+4.1			
Liver		Basophilic Focus	
		Clear Cell Focus	Minimal
Nose		Fungus	Mild
		Inflammation	Acute, Mild
		Adenoma	
Preputial Gland			
Note: [ ADENOMA ] TGLs = 1-10,3-10,4-10			
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 6-7.1			
Skin		Squamous Cell Papilloma	
Note: [ SQ CL PAPILOM ] TGLs = 2-14			
Spleen		Fibrosis	Mild
Note: [ FIBROSIS ] TGLs = 7-3.1			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 5-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 22	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892424

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1			
Mesentery		Leukemia Mononuclear	
	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 4-14			
Nose		Fungus	
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
Sem Ves			
Note: NORMAL ON MICRO EXAM.			
Skin		Hyperkeratosis	Mild
		Hyperplasia	Basal Cell, Moderate
		Inflammation	Chronic Active, Mild
Note: TGL #2: PROBABLE KELOID			
Note: [ HYPERPLASIA ] TGLs = 1-10.1+10.2			
Note: PROBABLE PSEUDOEPITHELIOMATOUS HYPERPLASIA			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-3.1 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7			
Thymus		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH -

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Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

Animal Note: NOT IN SAME GLAND

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 23

TRT#: 1

SEX: Male

DAY ON TEST: 462

DOSE: 0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881428

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Lymph Node, Mesenteric	Mammary Gland	Skin
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver			
Note: BILE DUCT HYPERPLASIA: + TO 2+			
Pancreas	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Note: NEST OF DEGRANULATED CELLS			
Preputial GI			
Note: DISTENDED DUCTS			
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 24

TRT#: 1

SEX: Male

DAY ON TEST: 672

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892425

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Brain	Epididymis
Esophagus	Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum
Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum	Mammary Gland
Nose	Parathyroid Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Blood		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-15			
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
		Thrombosis	Minimal
Islets, Pancreatic		Hyperplasia	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 13-6+6.1,14-6.2			
Note: [ LEUKEMIA MONUC ] TGLs = 8-6+6.1+6.2			
Note: HYPERPLASIA IN SECTION ON SLIDE #6			
Note: PELIOSIS AND SPONGIOSIS HEPATIS			
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-9.1,11-9.1			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-9.1,11-9.1			
Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 24

TRT#: 1

SEX: Male

DAY ON TEST: 672

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892425

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ LEUKEMIA MONUC ] TGLs = 6-9.1,11-9.1			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Preputial Gland		Abscess	Mild
Note: [ ABSCESS ] TGLs = 3-10			
Spleen		Leukemia Mononuclear	
Note: PIGMENT			
Note: [ LEUKEMIA MONUC ] TGLs = 7-3.1			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Stomach, Glandular		Erosion	Mild
Note: [ EROSION ] TGLs = 12-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 4-7,5-7			
Thymus		Leukemia Mononuclear	
Tongue		Squamous Cell Papilloma	
Note: [ SQ CL PAPILOM ] TGLs = 10-14			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 25

TRT#: 1

SEX: Male

DAY ON TEST: 692

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892426

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
Parathyroid Gland	Pituitary Gland	Preputial Gland	Salivary Glands
Seminal Vesicle	Skin	Stomach, Forestomach	Stomach, Glandular
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
Blood		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-15			
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Basophilic Focus	
		Fatty Change	Focal, Moderate
		Leukemia Mononuclear	
		Thrombosis	Mild
Note: [ FATTY CHANGE ] TGLs = 13-6+6.1+6.2			
Note: [ BASOPH FOCUS ] TGLs = 12-6+6.1+6.2			
Note: [ LEUKEMIA MONUC ] TGLs = 8-6+6.1+6.2			
Note: POSSIBLE EOSINOPHILIC FOCUS			
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 11-2+3			
Lymph Node	Lumbar	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-14,10-3			

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 25

TRT#: 1

SEX: Male

DAY ON TEST: 692

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892426

ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node, Mandibular

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 9-14,10-3

Lymph Node, Mesenteric

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 9-14,10-3

Nose

Fungus

Mild

Inflammation

Acute, Mild

Respirat Epith

Metaplasia

Squamous, Mild

Pancreas

Vein

Angiectasis

Mild

Acinus

Atrophy

Mild

Note: [ ANGIECTASIS ] TGLs = 6-9.1

Prostate

Inflammation

Acute, Moderate

Metaplasia

Squamous, Moderate

Skeletal Muscle

Leukemia Mononuclear

Spleen

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 7-3.1

Testes

Interstit Cell

Adenoma

Marked

Seminif Tub

Atrophy

Note: [ ADENOMA ] TGLs = 4-7

Note: [ ATROPHY ] TGLs = 5-7

Thymus

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 26

TRT#: 1

SEX: Male

DAY ON TEST: 661

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892427

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	Mammary Gland	Parathyroid Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Stomach, Glandular	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Hyperplasia	Mild
Blood		Leukemia Mononuclear	
Brain		Hemorrhage	Moderate
	[ Hemorrhage TGLS = 8-1 ]	Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Basophilic Focus	
		Leukemia Mononuclear	
		Thrombosis	Mild
Note: SPONGIOSIS HEPATIS			
Note: [ LEUKEMIA MONUC ] TGLs = 3-6+6.1			
Note: [ BASOPH FOCUS ] TGLs = 4-6+6.1,6-6+6.1			
Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-8			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-8			
Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 26

TRT#: 1

SEX: Male

DAY ON TEST: 661

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892427

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ LEUKEMIA MONUC ] TGLs = 2-8

Nose	Nasolacrim Dct	Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland		Leukemia Mononuclear	
Preputial Gland		Cyst	Mild
Note: [ CYST ] TGLs = 7-10.1			
Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
Note: [ FIBROSIS ] TGLs = 5-3.2			
[ Leukemia Mononuclear TGLS = 1-3.1+3.2 ]			
Stomach, Forestomach		Hyperkeratosis	Mild
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 27

TRT#: 1

SEX: Male

DAY ON TEST: 461

DOSE: 0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881429

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	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**

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Hepatodiaphragmatic Nodule	
Note: BILE DUCT HYPERPLASIA: + TO 2+ [ Hepatodiaphragmatic Nodule TGLS = 1-6 ]			
Pancreas	Acinus	Atrophy	Mild
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 28

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892428

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Thymus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ CLEAR CL FOCUS ] TGLs = 6-6+6.1			
Mammary Gland		Fibroadenoma	
[ Fibroadenoma TGLS = 1-14+14.1 ]			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
Spleen		Leukemia Mononuclear	
Note: CONGESTION AND PIGMENT			
Note: [ LEUKEMIA MONUC ] TGLs = 4-3.1,5-3.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 29

TRT#: 1

SEX: Male

DAY ON TEST: 692

DOSE: 0 ML/KG

DISP: Natural Death

HISTO: 892429

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lung	Lymph Node, Mandibular	Mammary Gland	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Eye	Cornea	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 1-14			
Note: CORNEAL ULCER			
Heart		Cardiomyopathy	Moderate
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Mild
Note: MINERALIZATION (2plus)			
Liver		Basophilic Focus	
		Necrosis	Mild
Lung			
Note: NO DEFORMITY ON MICRO EXAM.			
Lymph Node	Mediastinal	Angiectasis	Moderate
Note: [ ANGIECTASIS ] TGLs = 5-3			
Lymph Node, Mesenteric		Angiectasis	Mild
Note: [ ANGIECTASIS ] TGLs = 5-3			
Nose		Foreign Body	Minimal
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Nasopharyn Dct	Squamous Cell Carcinoma	
Note: [ SQUAM CEL CARC ] TGLs = 7-12			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 29

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 692

**DOSE:** 0 ML/KG

**DISP:** Natural Death

**HISTO:** 892429

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pancreas	Acinus	Atrophy	Mild
Spleen		Pigmentation	Moderate
[ Pigmentation TGLS = 4-3 ]			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE





Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 30

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892430

ORGAN AND ACCOUNTABLE SITE STATUS

	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 3-16,4-16			
Pancreas	Acinus	Atrophy	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 8-7.1			
Skeletal Muscle	Abdominal	Fibrosis	Mild
Note: [ FIBROSIS ] TGLs = 5-16			
Note: NO TDMS TERM FOR ADHESION			
Skin	Subcut Tiss	Fibroma	Multiple
Note: [ FIBROMA ] TGLs = 1-14+14.1,2-15			
Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
Note: [ FIBROSIS ] TGLs = 9-3.1			
Note: [ LEUKEMIA MONUC ] TGLs = 10-3+3.1+3.2			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 6-7,7-7			
Thymus		Leukemia Mononuclear	
Thyroid Gland	Follicle	Cyst	
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 31

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892431

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	Lymph Node, Mesenteric	Mammary Gland
Nose	Parathyroid Gland	Preputial Gland	Prostate
Skeletal Muscle	Skin	Stomach, Forestomach	Stomach, Glandular
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Cortex		Inflammation Thrombosis	Granulomatous, Moderate Marked
Note: [ THROMBUS ] TGLs = 5-8			
Note: 1991 CONVERSION DISCREPANCY. ORIGINAL DIAGNOSIS SITE NOT SPECIFIED.			
Note: 1991 CONVERSION DISCREPANCY. ORIGINAL DIAGNOSIS SITE NOT SPECIFIED.			
Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Minimal
Note: [ PHEOCHROM BGN ] TGLs = 5-8			
Heart		Cardiomyopathy	Mild
Kidney		Leukemia Mononuclear Nephropathy	Moderate
Liver		Basophilic Focus Clear Cell Focus Eosinophilic Focus Hyperplasia Leukemia Mononuclear	Minimal  Mild
Note: BILE DUCT HYPERPLASIA			
Note: [ HYPERPLASIA ] TGLs = 6-6			
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1			
Lymph Node	Lymphatic, Mediastinal	Ectasia	Mild
Note: [ ECTASIA ] TGLs = 7-8			
Pancreas	Acinus	Atrophy	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 31

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892431

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 2-7.1			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 3-3+3.1,4-3+3.1 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			
Thymus		Thymoma Benign	
Thyroid Gland	C Cell	Hyperplasia	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 32

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892432

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Mammary Gland	Parathyroid Gland
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OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	Minimal
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-6+6.1			
Note: [ BASOPH FOCUS ] TGLs = 6-6			
Lung	Alveolar Epith	Hyperplasia	Moderate
Lymph Node, Mesenteric		Hyperplasia	Lymphoid, Mild
Note: [ HYPERPLASIA ] TGLs = 3-8			
Nose	Respirat Epith	Fungus	Mild
		Hyperplasia	Minimal
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-3+3.1,5-3+3.1			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 32

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892432

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 33

TRT#: 1

SEX: Male

DAY ON TEST: 671

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892433

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal 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	Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland
Nose	Parathyroid Gland	Pituitary Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Trachea
Urinary Bladder			

OBSERVATIONS

Blood		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Nephropathy	Mild
		Pigmentation	Moderate
Note: [ NEPHROPATHY ] TGLs = 6-4			
Liver		Fatty Change	Focal, Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-6			
Lung		Leukemia Mononuclear	
Pancreas	Acinus	Atrophy	Moderate
Preputial Gland		Cyst	Moderate
Note: CHARACTERISTIC DIMINISHED LINING EPITHELIUM.			
Note: [ CYST ] TGLs = 9-10			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen		Infarct	Moderate
		Leukemia Mononuclear	
Note: [ INFARCT ] TGLs = 5-3.1			
[ Infarct TGLS = 4-3.1 ]			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 33

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 671

**DOSE:** 0 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892433

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Stomach, Glandular

Erosion

Mild

Note: [ EROSION ] TGLs = 8-5.1

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7

Thymus

Leukemia Mononuclear

Thyroid Gland

C Cell

Adenoma

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**PRIMARY CAUSE OF DEATH**

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Animal Note: TGL#3 PANCREATIC LN NOT PRESENT IN SECTION.

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 34

TRT#: 1

SEX: Male

DAY ON TEST: 613

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892434

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	Nose
Parathyroid Gland	Pituitary Gland	Preputial Gland	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Mammary Gland

OBSERVATIONS

Adrenal Cortex	Leukemia Mononuclear	
Adrenal Medulla	Hyperplasia	Minimal
Heart	Leukemia Mononuclear	
	Cardiomyopathy	Mild
Islets, Pancreatic	Leukemia Mononuclear	
Note: [ ADENOMA ] TGLs = 10-9.1	Adenoma	Multiple
Kidney	Leukemia Mononuclear	
	Nephropathy	Mild
	Pigmentation	Mild
Liver	Basophilic Focus	
	Fatty Change	Focal, Mild
	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 3-6+6.1+6.2		
Note: [ FATTY CHANGE ] TGLs = 12-6+6.1+6.2		
Note: [ BASOPH FOCUS ] TGLs = 11-6+6.1+6.2		
Note: SPONGIOSIS HEPATIS IN #6.2		
Lung	Infiltration Cellular	Histiocyte, Moderate
	Leukemia Mononuclear	
[ Leukemia Mononuclear TGLs = 4-2+2.1+3,5-2+2.1+3 ]		
Lymph Node	Mediastinal	Leukemia Mononuclear

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 34	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 613
	<b>DOSE:</b> 0 ML/KG	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 892434

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ LEUKEMIA MONUC ] TGLs = 6-3			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-3			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-3			
Pancreas	Acinus	Atrophy	Marked
		Leukemia Mononuclear	
Prostate		Leukemia Mononuclear	
		Metaplasia	Squamous, Minimal
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-3.1+3.2,7-3.1+3.2,8-3.1+3.2			
Note: ALSO ANGIOECTASIS			
Stomach, Forestomach		Hyperkeratosis	Mild
		Hyperplasia	Basal Cell, Minimal
Testes	Interstit Cell	Adenoma	
	Seminif Tub	Atrophy	Moderate
	Interstit Cell	Hyperplasia	Minimal
Note: [ ADENOMA ] TGLs = 1-7			
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			
Note: [ ATROPHY ] TGLs = 9-7			
Thymus		Leukemia Mononuclear	

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PRIMARY CAUSE OF DEATH	-
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 35

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892435

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Nose	Parathyroid Gland	Preputial Gland
Prostate	Skeletal Muscle	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 6-6+6.1			
Lymph Node	Pancreatic	Hyperplasia	Lymphoid, Moderate
Note: [ HYPERPLASIA ] TGLs = 7-9.2			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 5-14			
Pancreas	Acinus	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Cyst	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 4-7.1			
Skin		Cyst Epithelial Inclusion	
Note: [ CYST EPITH INC ] TGLs = 1-15			
Spleen		Leukemia Mononuclear	
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 36

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892436

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 6-6+6.1,7-6+6.1			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 4-14			
Pancreas	Acinus	Atrophy	Moderate
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 5-10			
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 3-7.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 37

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892437

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Nose	Parathyroid Gland	Pituitary Gland
Prostate	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Malignant	
Note: [ PHEOCHROM MAL ] TGLs = 6-8			
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Note: [ NEPHROPATHY ] TGLs = 8-4			
Liver		Basophilic Focus	
		Clear Cell Focus	Minimal
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 10-6,11-6.1			
Lymph Node	Mediastinal	Hematopoietic Cell Proliferation	Moderate
Note: [ HEMA CELL PROL ] TGLs = 9-3			
Pancreas	Acinus	Atrophy	Mild
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 1-10.1,2-10.1			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 5-7.1			
Spleen		Leukemia Mononuclear	
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7,4-7			
Thymus			
Note: HEMATOCELLULAR PROLIFERATION			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 37	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 736 <b>HISTO:</b> 892437
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Thyroid Gland	C Cell	Hyperplasia	Moderate
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PRIMARY CAUSE OF DEATH

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Animal Note: NOT IN SAME GLAND

Animal Note: NORMAL SIZE ON MICRO EXAM. TGL#7

Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

Animal Note: REACTIVE HYPERPLASIA

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 38

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892438

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	Parathyroid Gland	Preputial Gland
Prostate	Salivary Glands	Skeletal Muscle	Skin
Stomach, Forestomach	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
		Pigmentation	Mild
Liver		Basophilic Focus	
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 12-6+6.1+6.2+6.3,			
Note: [ LEUKEMIA MONUC ] TGLs = 7-6+6.1+6.2+6.3,			
Note: [ BASOPH FOCUS ] TGLs = 13-6+6.1+6.2+6.3			
Note: [ LEUKEMIA MONUC ] TGLs = 8-6+6.1+6.2+6.3			
Lung	Alveolar Epith	Hyperplasia	Moderate
		Leukemia Mononuclear	
Note: [ HYPERPLASIA ] TGLs = 10-2.1			
[ Hyperplasia TGLS = 11-2+2.1+3 ]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1			

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 38

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892438

ORGAN AND ACCOUNTABLE SITE STATUS

Lymph Node, Mandibular Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1		Leukemia Mononuclear	
Lymph Node, Mesenteric Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1		Leukemia Mononuclear	
Pancreas Acinus		Atrophy	Moderate
Pituitary Gland		Leukemia Mononuclear	
Seminal Vesicle Note: [ DEPLETION ] TGLs = 3-7.1		Depletion Cellular	Marked
Spleen  Note: [ FIBROSIS ] TGLs = 6-3.3 Note: [ LEUKEMIA MONUC ] TGLs = 5-3.1+3.2+3.3		Fibrosis Leukemia Mononuclear	Minimal
Stomach, Glandular Note: [ EROSION ] TGLs = 14-5.1		Erosion	Mild
Testes Note: [ ADENOMA ] TGLs = 2-7	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland C Cell		Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 39

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892439

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric
Pituitary Gland	Prostate	Skeletal Muscle	Skin
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Islets, Pancreatic		Hyperplasia	Moderate
Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 7-6+6.1+6.2		
Note: HEPATIS IN A BASOPHILIC FOCUS			
Note: [ BASOPH FOCUS ]	TGLs = 8-6.1+6.2,9-6.1+6.2		
Note: TGL #8: SPONGIOSIS AND PELIOSIS			
Mammary Gland		Fibroadenoma	
Note: [ FIBROADENOMA ]	TGLs = 1-10.2		
Nose		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Minimal
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Moderate
Preputial Gland		Adenoma	
		Dilatation	Multiple, Moderate

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

**ANIMAL ID:** 39

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892439

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ DILATATION ] TGLs = 2-10			
Note: [ ADENOMA ] TGLs = 3-10.1			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 5-7.1			
Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
Note: [ FIBROSIS ] TGLs = 6-3.1			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 4-7			
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 40

TRT#: 1

SEX: Male

DAY ON TEST: 691

DOSE: 0 ML/KG

DISP: Natural Death

HISTO: 892440

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Bone Marrow	Brain	Epididymis
Esophagus	Islets, Pancreatic	Pancreas	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Thymus
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

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
Heart		Cardiomyopathy	Moderate
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-6.1,7-6			
Lung		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 11-2+3+3.3 ]			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-8,8-3			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-8,8-3			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-8,8-3			
Mammary Gland		Fibroadenoma	
Note: [ FIBROADENOMA ] TGLs = 2-10.1			
Nose	Vein	Thrombosis	Mild
Preputial GI			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 40	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Natural Death	<b>DAY ON TEST:</b> 691 <b>HISTO:</b> 892440
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: NO NODULE SEEN AT MICRO EXAM, TGL 12. Spleen		Fibrosis Leukemia Mononuclear	Mild
Note: [ FIBROSIS ] TGLs = 14-3.1+3.2,15-3.1+3.2 [ Leukemia Mononuclear TGLS = 4-3+3.1+3.2 ]			
Stomach, Forestomach Stomach, Glandular		Hyperplasia Erosion	Basal Cell, Minimal Mild
Note: [ EROSION ] TGLs = 13-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7			
Thyroid Gland	C Cell	Adenoma	
Note: TGL#10 NORMAL SIZE ON MICRO EXAM. [ Adenoma TGLS = 9-2 ]			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 41

TRT#: 1

SEX: Male

DAY ON TEST: 461

DOSE: 0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881430

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

Kidney		Nephropathy	Minimal
Liver			
Note: BILE DUCT HYPERPLASIA: +			
Lung			
Note: CONGESTION OR NOT ENOUGH FORMALIN INSTILLED			
Nose		Fungus	Mild
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ ADENOMA ] TGLs = 1-8			
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 42

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892441

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Prostate
Salivary Glands	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Moderate
Note: 1991 CONVERSION DISCREPANCY. ORIGINAL DIAGNOSIS SITE NOT SPECIFIED.			
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
Note: [ NEPHROPATHY ] TGLs = 6-4			
Liver		Basophilic Focus Clear Cell Focus Mixed Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 7-6+6.1			
Nose		Fungus Inflammation Metaplasia Inflammation	Mild Acute, Mild Squamous, Mild Chronic Active, Mild
Pancreas	Respirat Epith Artery		
Note: [ INFLAMMATION ] TGLs = 5-9.2			
Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-10.1 ]			
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 4-7.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 42

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892441

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Thyroid Gland

C Cell

Adenoma

C Cell

Hyperplasia

Moderate

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 43

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892442

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Skeletal Muscle	Skin	Stomach, Forestomach	Stomach, Glandular
Thymus	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	Minimal
		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 9-6+6.1+6.2			
Note: [ HDN ] TGLs = 7-6.2			
Lymph Node	Pancreatic	Hyperplasia	Lymphoid, Mild
Note: [ HYPERPLASIA ] TGLs = 10-9.1			
Mammary Gland		Fibroadenoma	
Note: [ FIBROADENOMA ] TGLs = 1-15+15.1			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 5-14			
Nose		Foreign Body	Minimal
		Inflammation	Acute, Moderate
		Metaplasia	Squamous, Mild
Note: METAPLASIA IN OROPHARYNX			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 43

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892442

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 8-8

Seminal Vesicle

Depletion Cellular

Marked

Note: [ DEPLETION ] TGLs = 4-7.1

Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 6-3 ]

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7,3-7

Thyroid Gland

C Cell

Hyperplasia

Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 44

TRT#: 1

SEX: Male

DAY ON TEST: 610

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892443

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Pituitary Gland	Prostate	Skeletal Muscle
Skin	Stomach, Forestomach	Stomach, Glandular	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: PIGMENT IN ENDOTHELIAL CELLS			
Note: [ LEUKEMIA MONUC ] TGLs = 8-6			
Lung		Leukemia Mononuclear	
Nose		Foreign Body	Minimal
		Fungus	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Minimal
Preputial Gland		Dilatation	Mild
Note: [ DILATATION ] TGLs = 1-10			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 3-7.1			
Spleen		Fibrosis	Mild
Note: [ FIBROSIS ] TGLs = 6-3			
[ Leukemia Mononuclear TGLS = 4-3+3.1,5-3+3.1,7-3+3.1 ]			
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 44

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 610

**DOSE:** 0 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892443

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 2-7

Thymus

Leukemia Mononuclear

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 45

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892444

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
Parathyroid Gland	Preputial Gland	Prostate	Seminal Vesicle
Skeletal Muscle	Skin	Stomach, Glandular	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Thymus

OBSERVATIONS

Adrenal Cortex	Leukemia Mononuclear	
Adrenal Medulla	Hyperplasia	Moderate
	Leukemia Mononuclear	
Blood	Leukemia Mononuclear	
Bone Marrow	Leukemia Mononuclear	
Heart	Cardiomyopathy	Mild
	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 14-13		
Kidney	Leukemia Mononuclear	
	Nephropathy	Mild
Liver	Eosinophilic Focus	
	Hepatocellular Adenoma	
	Hyperplasia	Mild
	Leukemia Mononuclear	
Note: [ HYPERPLASIA ] TGLs = 9-6.2		
Note: PELIOSIS AND SPONGIOSIS HEPATIS		
Note: [ EOSIN FOCUS ] TGLs = 15-6.2		
Note: [ HEPATOCLR ADEN ] TGLs = 8-6.1		
Note: [ LEUKEMIA MONUC ] TGLs = 10-6+6.1+6.2		
Note: SPONGIOSIS HEPATIS		
Lung	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 45	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 739
	<b>DOSE:</b> 0 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892444

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ LEUKEMIA MONUC ] TGLs = 12-2+2.1+3			
Lymph Node	Lumbar	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-9,6-14,7-8.1			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-9,6-14,7-8.1			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-9,6-14,7-8.1			
Nose		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
		Leukemia Mononuclear	
Salivary Glands		Leukemia Mononuclear	
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Spleen		Fibrosis	Moderate
		Leukemia Mononuclear	
Note: [ FIBROSIS ] TGLs = 13-3.2			
Note: [ LEUKEMIA MONUC ] TGLs = 5-3.1+3.2			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			
Tissue NOS	Mediastinum	Leukemia Mononuclear	
Note: LEUKEMIC INFILTRATES APPEAR AS ENLARGED L.N.			
Note: [ LEUKEMIA MONUC ] TGLs = 11-3.1			

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 46

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892445

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Parathyroid Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
[ Nephropathy TGLS = 3-4 ]			
Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
[ Basophilic Focus TGLS = 8-6+6.2 ]			
[ Clear Cell Focus TGLS = 9-6+6.1+6.2 ]			
[ Hepatodiaphragmatic Nodule TGLS = 4-6.1 ]			
Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
	Alveolus	Pigmentation	Focal, Minimal
Note: [ PIGMENT ] TGLs = 10-3,7-3			
Note: [ INFILTRAT CELL ] TGLs = 10-3,7-3			
Pancreas	Acinus	Atrophy	Mild
Preputial Gland		Abscess	Moderate
		Adenoma	
Note: [ ABSCESS ] TGLs = 2-10			
Note: [ ADENOMA ] TGLs = 6-10			
Skin		Cyst Epithelial Inclusion	
Note: [ CYST EPITH INC ] TGLs = 1-14			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 46	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 0 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892445

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 5-7			
Thyroid Gland	C Cell	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 47

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892446

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Lung	Alveolar Epith	Hyperplasia	Moderate
Pancreas	Acinus	Atrophy	Moderate
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 48

TRT#: 1

SEX: Male

DAY ON TEST: 461

DOSE: 0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881431

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver			
Note: BILE DUCT HYPERPLASIA (2+) AND FOCAL NECROSIS			
Pancreas	Acinus	Atrophy	Mild
Preputial Gland		Abscess	Mild
		Hyperplasia	Minimal
Salivary Glands	Duct	Metaplasia	Minimal
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: HYPERPLASIA IN ONE TESTIS [ Hyperplasia TGLS = 1-7 ]			
Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 49

TRT#: 1

SEX: Male

DAY ON TEST: 684

DOSE: 0 ML/KG

DISP: Natural Death

HISTO: 892447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Ear	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	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Spleen	Stomach, Forestomach	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 8-6			
Lung			
Note: TGL#7 NORMAL ON MICRO EXAM.			
Pancreas	Acinus	Atrophy	Minimal
Parathyroid Gland		Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Stomach, Glandular		Erosion	Minimal
Note: [ EROSION ] TGLs = 9-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7,4-7,5-7			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 50

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Spleen	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 6-6+6.1+6.2			
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1+6.2			
Lung		Congestion	Moderate
Note: [ CONGESTION ] TGLs = 4-2+3.1			
Lymph Node, Mandibular		Infiltration Cellular	Plasma Cell, Mild
Note: [ INFILTRAT CELL ] TGLs = 1-9			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 3-14			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

PRIMARY CAUSE OF DEATH

-

Animal Note: NOT IN THE SAME GLAND

Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 51

TRT#: 1

SEX: Male

DAY ON TEST: 462

DOSE: 0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881432

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Liver	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Lymph Node	Renal	Angiectasis	Mild
	Renal	Infiltration Cellular	Histiocyte, Mild
Note: [ ANGIECTASIS ] TGLs = 2-4			
Nose		Fungus	Mild
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Moderate
Pituitary Gland	Pars Nervosa	Cyst	
Note: [ CYST ] TGLs = 3-8			
Preputial Gland		Adenoma	
Spleen			
Note: MODERATE TO MARKED CONGESTION			
Testes	Interstit Cell	Hyperplasia	Mild
Thymus		Depletion Lymphoid	Mild

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 52

TRT#: 1

SEX: Male

DAY ON TEST: 601

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892449

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	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	Parathyroid Gland	Preputial Gland	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Thyroid Gland
Trachea			

OBSERVATIONS

Bone Marrow		Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-1+1.1			
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Nephropathy	Mild
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-6+6.1			
Lung		Leukemia Mononuclear	
Lymph Node, Mandibular		Leukemia Mononuclear	
Lymph Node, Mesenteric		Leukemia Mononuclear	
Nose		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Prostate	Interstitium	Edema	Mild
Note: [ EDEMA ] TGLs = 2-7.1			
Spinal Cord		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLs = 8-14 ]			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLs = 3-3.1 ]			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 52

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 601

**DOSE:** 0 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892449

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Stomach, Glandular

Erosion

Mild

Note: [ EROSION ] TGLs = 4-5.1

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 7-7

Thymus

Leukemia Mononuclear

Urinary Bladder

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 1-9

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 53

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892450

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	Mammary Gland	Nose
Prostate	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
		Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 7-8			
Blood		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Kidney		Leukemia Mononuclear	
		Nephropathy	Moderate
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 11-6.2			
Note: [ CLEAR CL FOCUS ] TGLs = 10-6+6.1			
Note: PELIOSIS AND SPONGIOSIS HEPATIS			
Note: [ LEUKEMIA MONUC ] TGLs = 6-6+6.1+6.2			
Lung		Leukemia Mononuclear	
Lymph Node	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1			
Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 53

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892450

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ LEUKEMIA MONUC ] TGLs = 9-9.1			
Pancreas	Acinus	Atrophy	Mild
Parathyroid Gland		Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
		Leukemia Mononuclear	
Preputial Gland		Cyst	Moderate
Note: [ CYST ] TGLs = 8-10			
Salivary Glands		Adenoma	
	Duct	Metaplasia	Squamous, Minimal
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 3-7.1			
Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
Note: [ FIBROSIS ] TGLs = 5-3.1			
Note: [ LEUKEMIA MONUC ] TGLs = 4-3.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 54

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892451

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	Parathyroid Gland	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Cortex Note: 1991 CONVERSION DISCREPANCY. ORIGINAL DIAGNOSIS SITE NOT SPECIFIED.		Metaplasia	Osseous, Moderate
Adrenal Medulla  Note: [ PHEOCHROM MAL ] TGLs = 9-8		Hyperplasia Pheochromocytoma Malignant	Minimal
Heart		Cardiomyopathy	Moderate
Kidney Note: [ NEPHROPATHY ] TGLs = 10-4		Nephropathy	Moderate
Liver  Note: [ BASOPH FOCUS ] TGLs = 13-6+6.1 Note: [ HEPATOCLR ADEN ] TGLs = 11-6		Basophilic Focus Clear Cell Focus Hepatocellular Adenoma	
Lung  Note: [ FIBROSIS ] TGLs = 12-2		Fibrosis Inflammation	Mild Acute, Mild
Mammary Gland Note: [ FIBROADENOMA ] TGLs = 2-16+16.1		Fibroadenoma	
Mesentery Fat Fat		Inflammation Necrosis	Chronic Active, Mild Mild
Note: [ INFLAMMATION ] TGLs = 5-15,6-15 Note: [ NECROSIS ] TGLs = 4-14			

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 54

TRT#: 1

SEX: Male

DAY ON TEST: 736

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892451

**ORGAN AND ACCOUNTABLE SITE STATUS**

Nose	Respirat Epith	Fungus Hyperplasia Inflammation	Mild Minimal Acute, Mild
Pancreas	Respirat Epith Acinus Acinus	Metaplasia Atrophy Hyperplasia	Squamous, Mild Mild Mild
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 3-10			
Skeletal Muscle		Fibrosis	Mild
Note: [ FIBROSIS ] TGLs = 5-15			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 7-7,8-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 55

TRT#: 1

SEX: Male

DAY ON TEST: 710

DOSE: 0 ML/KG

DISP: Natural Death

HISTO: 892452

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Colon
Intestine Large, Rectum	Intestine Small, Duodenum	Islets, Pancreatic	Lymph Node, Mandibular
Lymph Node, Mesenteric	Parathyroid Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Mammary Gland

AUTO PRECLUDES DIAG.

Intestine Large, Cecum

Intestine Small, Ileum

Intestine Small, Jejunum

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Necrosis	Mild
Note: [ NECROSIS ] TGLs = 5-6			
Lung		Infiltration Cellular	Histiocyte, Mild
	Alveolus	Inflammation	Acute, Minimal
Note: [ INFLAMMATION ] TGLs = 4-3			
Nose		Fungus	Mild
		Inflammation	Acute, Minimal
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
Spleen		Fibrosis	Moderate
		Hematopoietic Cell Proliferation	Moderate
Note: [ FIBROSIS ] TGLs = 3-3.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 55

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 710

**DOSE:** 0 ML/KG

**DISP:** Natural Death

**HISTO:** 892452

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 56

TRT#: 1

SEX: Male

DAY ON TEST: 457

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 881462

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Nephropathy	Mild
		Pigmentation	Moderate
Liver		Fatty Change	Focal, Mild
		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Spleen		Leukemia Mononuclear	
Testes	Bilateral, Interstit Cell	Adenoma	
Thymus			

Note: [ LEUKEMIA MONUC ] TGLs = 1-3.1

Note: ATROPHY AND LYMPHOID DEPLETION

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 57

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892453

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	Pituitary Gland	Preputial Gland
Prostate	Skeletal Muscle	Skin	Stomach, Glandular
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
	Bilateral	Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 4-8			
Blood		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Kidney	Renal Tubule	Adenoma	
		Leukemia Mononuclear	
		Nephropathy	Mild
Liver		Basophilic Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-6			
Note: PELIOSIS AND SPONGIOSIS HEPATIS			
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-2+3			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-8			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-8			

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 57

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892453

**ORGAN AND ACCOUNTABLE SITE STATUS**

Lymph Node, Mesenteric

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 7-8

Pancreas

Acinus

Atrophy

Moderate

Salivary Glands

Duct

Metaplasia

Squamous, Mild

Seminal Vesicle

Depletion Cellular

Marked

Note: [ DEPLETION ] TGLs = 2-7.1

Spleen

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 3-3

Stomach, Forestomach

Hyperkeratosis

Minimal

Hyperplasia

Basal Cell, Minimal

Squamous Cell Papilloma

Note: [ SQ CL PAPILOM ] TGLs = 8-5

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7

PRIMARY CAUSE OF DEATH

-

Animal Note: PAPILOMA WITH THE STOCK CUT OFF

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 58

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892454

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 6-6			
Lymph Node	Pancreatic	Hyperplasia	Lymphoid, Moderate
Note: [ HYPERPLASIA ] TGLs = 7-9.1			
Mammary Gland		Fibroadenoma	
Note: [ FIBROADENOMA ] TGLs = 1-14+14.1			
Mesentery	Fat	Necrosis	Mild
Note: [ NECROSIS ] TGLs = 4-15			
Nose		Foreign Body	Minimal
		Fungus	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Minimal
Seminal Vesicle		Depletion Cellular	Marked
Note: [ DEPLETION ] TGLs = 5-7.1			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 58

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 739

**DOSE:** 0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892454

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen

Leukemia Mononuclear

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7,3-7

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 59

TRT#: 1

SEX: Male

DAY ON TEST: 739

DOSE: 0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892455

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Mammary Gland

OBSERVATIONS

Adrenal Cortex		Necrosis	Moderate
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
		Sarcoma	
Note: [ SARCOMA ] TGLs = 3-4.1+4.2			
Liver		Basophilic Focus	
		Clear Cell Focus	Minimal
Note: [ BASOPH FOCUS ] TGLs = 4-6			
Nose		Foreign Body	Minimal
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Stomach, Forestomach		Hyperplasia	Basal Cell, Mild
Note: [ HYPERPLASIA ] TGLs = 5-5			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 60

TRT#: 1

SEX: Male

DAY ON TEST: 692

DOSE: 0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892456

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
Parathyroid Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Stomach, Glandular	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
		Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 6-8			
Blood		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-14			
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-6+6.1,18-6+6.1			
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 15-2+2.1+3			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-9.1,10-8,11-3,16-9			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-9.1,10-8,11-3,16-9			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-9.1,10-8,11-3,16-9			
Nose		Foreign Body	Minimal

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

<b>ANIMAL ID:</b> 60	<b>TRT#:</b> 1 <b>DOSE:</b> 0 ML/KG	<b>SEX:</b> Male <b>DISP:</b> Moribund Sacrifice	<b>DAY ON TEST:</b> 692 <b>HISTO:</b> 892456
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ORGAN AND ACCOUNTABLE SITE STATUS

Pancreas	Respirat Epith	Fungus	Mild
Pituitary Gland	Respirat Epith	Hyperplasia	Minimal
Note: [ ADENOMA ] TGLs = 12-8,13-8	Acinus	Inflammation	Acute, Mild
Preputial Gland	Pars Distalis	Metaplasia	Squamous, Mild
Note: [ DILATATION ] TGLs = 3-10		Atrophy	Moderate
Spleen		Adenoma	
Note: [ FIBROSIS ] TGLs = 17-3.1		Dilatation	Mild
Note: [ LEUKEMIA MONUC ] TGLs = 8-3.1		Fibrosis	Moderate
Stomach, Forestomach		Leukemia Mononuclear	
Note: [ ULCER ] TGLs = 14-5+5.1		Hyperkeratosis	Mild
Testes	Bilateral, Interstit Cell	Hyperplasia	Basal Cell, Mild
Note: [ ADENOMA ] TGLs = 4-7,5-7		Ulcer	Moderate
Thymus		Adenoma	
Thyroid Gland	Follicular Cel	Leukemia Mononuclear	
	C Cell	Adenoma	
		Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 61

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892557

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Prostate	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Glandular	Thymus	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Note: [ CARDIOMYOPATHY ] TGLs = 6-13			
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 8-6+6.1			
Lung		Leukemia Mononuclear	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Minimal
Note: [ CYST ] TGLs = 7-8			
Preputial Gland		Abscess	Minimal
Note: [ ABSCESS ] TGLs = 1-10			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

**ANIMAL ID:** 61

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735

**HISTO:** 892557

**ORGAN AND ACCOUNTABLE SITE STATUS**

Salivary Glands Sem Ves Note: TGL 4 NORMAL ON MICRO EXAM.	Duct	Metaplasia	Squamous, Minimal
Spleen Note: [ LEUKEMIA MONUC ] TGLs = 5-2		Leukemia Mononuclear	
Stomach, Forestomach		Hyperkeratosis Hyperplasia	Minimal Basal Cell, Minimal
Testes Note: [ ADENOMA ] TGLs = 2-7,3-7	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland	Follicle	Cyst	
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 62

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892558

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Mammary Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 6-6+6.1			
Lung	Alveolar Epith	Hyperplasia	Mild
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Minimal
Note: [ ADENOMA ] TGLs = 5-9.1			
Preputial GI			
Note: TGL 2 NORMAL ON MICRO EXAM.			
Skin		Squamous Cell Carcinoma	
Note: [ SQUAM CEL CARC ] TGLs = 1-14			
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 62

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892558

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 3-7,4-7

Thyroid Gland

C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 63

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892557

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	Lymph Node, Mesenteric	Mammary Gland
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Spleen	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Cortex		Hyperplasia	Mild
Adrenal Medulla		Hyperplasia	Moderate
Heart		Cardiomyopathy	Mild
Note: [ CARDIOMYOPATHY ] TGLs = 7-13			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1			
Lymph Node	Mediastinal	Ectasia	Minimal
Note: [ ECTASIA ] TGLs = 5-3			
Mesentery	Fat	Necrosis	Mild
Note: [ NECROSIS ] TGLs = 4-14			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Note: [ HYPERPLASIA ] TGLs = 6-8			
Skin		Squamous Cell Papilloma	
Note: [ SQ CL PAPILOM ] TGLs = 1-15			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 63

**TRT#:** 2  
**DOSE:** 2.5 ML/KG

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

**DAY ON TEST:** 735  
**HISTO:** 892557

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes  
Note: [ ADENOMA ] TGLs = 2-7,3-7

Bilateral, Interstit Cell

Adenoma

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 64

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 892560

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	Mammary Gland	Parathyroid Gland
Prostate	Salivary Glands	Seminal Vesicle	Skin
Stomach, Forestomach	Trachea	Urinary Bladder	

MISSING

Pituitary Gland

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
	Bilateral	Pheochromocytoma Benign	
Blood		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
		Thrombosis	Moderate
Note: [ LEUKEMIA MONUC ] TGLs = 20-13			
Intestine Small, Ileum	Lymphoid Tiss	Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
		Necrosis	Moderate
Note: [ LEUKEMIA MONUC ] TGLs = 10-6+6.1+6.2,16-6+6.1+6.2			
Note: [ NECROSIS ] TGLs = 11-6+6.2,13-6+6.2,14-6+6.2			
Lung		Edema	Minimal
		Hemorrhage	Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 21-2+3			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 64

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892560

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ LEUKEMIA MONUC ] TGLs = 2-9,6-8,9-9.1,19-3.1+13			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-9,6-8,9-9.1,19-3.1+13			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-9,6-8,9-9.1,19-3.1+13			
Mesentery		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 17-15			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Minimal
Note: TGL#18 VALID NCL			
Preputial Gland		Abscess	Minimal
Sem Ves			
Note: TGL 5 NORMAL ON MICRO EXAM.			
Skeletal Muscle		Fibrosis	Mild
Note: [ FIBROSIS ] TGLs = 12-14			
Note: FIBROUS ADHESION LIVER TO THORACIC WALL			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 7-3.1+3.2,8-3.1+3.2 ]			
Stomach, Glandular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 15-5			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7,4-7			
Thymus		Leukemia Mononuclear	
Thyroid Gland	Follicular Cel	Adenoma	
	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 65

TRT#: 2

SEX: Male

DAY ON TEST: 461

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881433

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Lymph Node, Mandibular	Thymus
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Liver		Basophilic Focus	
Lung			
Note: CONGESTION			
Nose		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 66

TRT#: 2

SEX: Male

DAY ON TEST: 388

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 881463

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Liver	Lung	Lymph Node, Mesenteric
Pancreas	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Forestomach	Stomach, Glandular	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Lymph Node, Mandibular	Mammary Gland	Thymus
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Hyperplasia	Minimal
Kidney		Nephropathy	Minimal
Liver			
Note: CLUSTERS OF HEMATOPOIETIC CELLS			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
		Carcinoma	
Salivary Glands			
Note: POORLY DIFFERENTIATED NEOPLASM			
[ Carcinoma TGLS = 1-13 ]			
Spleen		Hematopoietic Cell Proliferation	Moderate
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 67

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892561

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Pituitary Gland	Preputial Gland	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 5-8+8.1			
Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Moderate
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
Liver		Basophilic Focus	
		Hepatocellular Adenoma	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 8-6+6.1			
Note: [ HEPATOCLR ADEN ] TGLs = 7-6.1			
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-2+3			
Nose		Foreign Body	Minimal
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Note: FRUITY BODIES			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 67

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892561

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ ADENOMA ] TGLs = 4-7.1

Prostate Hyperplasia Minimal

Sem Ves

Note: TGL 3 NORMAL ON MICRO EXAM.

Skin Subcut Tiss Fibrosarcoma

Note: INFILTRATING BETWEEN MUSCLE BUNDLES

Note: [ FIBROSARC ] TGLs = 1-14

Spleen Leukemia Mononuclear

Testes Bilateral, Interstit Cell Adenoma

Note: [ ADENOMA ] TGLs = 2-7

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 68

TRT#: 2

SEX: Male

DAY ON TEST: 462

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881434

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Liver	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

**OBSERVATIONS**

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Nose		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Testes	Interstit Cell	Hyperplasia	Mild
Urinary Bladder		Calculus Gross Observation	
		Calculus Micro Observation Only	

Note: [ CALCUS MIC OBS ] TGLs = 1-9

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 69

TRT#: 2

SEX: Male

DAY ON TEST: 624

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 892562

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lung	Lymph Node, Mandibular	Mammary Gland	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Seminal Vesicle
Skeletal Muscle	Skin	Spleen	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Brain		Astrocytoma Malignant	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatocellular Adenoma	
Note: [ HEPATOCLR ADEN ] TGLs = 2-6.1			
Lymph Node, Mesenteric		Pigmentation	Moderate
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 4-12			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,5-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 69

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 624

**DOSE:** 2.5 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892562

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 70

TRT#: 2

SEX: Male

DAY ON TEST: 634

DOSE: 2.5 ML/KG

DISP: Natural Death

HISTO: 892563

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Parathyroid Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Moderate
Note: [ CARDIOMYOPATHY ] TGLs = 9-13			
Kidney		Nephropathy	Mild
Note: ALSO MINERALIZATION			
Liver		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 8-6.1			
Lymph Node, Mandibular		Angiectasis	Minimal
		Inflammation	Acute, Mild
Note: [ INFLAMMATION ] TGLs = 3-9			
Lymph Node, Mesenteric		Angiectasis	Mild
Nose		Foreign Body	Moderate
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 7-12			
Pancreas	Acinus	Atrophy	Mild
Preputial Gland		Cyst	
Note: [ CYST ] TGLs = 2-10			
Skin	Subcut Tiss	Fibroma	
		Squamous Cell Papilloma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 70

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Natural Death

**DAY ON TEST:** 634

**HISTO:** 892563

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ SQ CL PAPILOM ] TGLs = 10-15

Note: [ FIBROMA ] TGLs = 1-14

Spleen

[ Pigmentation TGLS = 5-3 ]

Stomach, Forestomach

Testes

Note: [ ADENOMA ] TGLs = 4-7

Bilateral, Interstit Cell

Pigmentation

Hyperkeratosis

Hyperplasia

Adenoma

Moderate

Minimal

Basal Cell, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 71

TRT#: 2

SEX: Male

DAY ON TEST: 736

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892564

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Skeletal Muscle	Skin	Spleen	Stomach, Glandular
Thymus	Trachea	Urinary Bladder	

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Note: [ CARDIOMYOPATHY ] TGLs = 6-13			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Lung		Infiltration Cellular	Histiocyte, Minimal
Note: [ INFILTRAT CELL ] TGLs = 5-2+3			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Moderate
Note: [ HYPERPLASIA ] TGLs = 7-9.1			
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 71	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 736
	<b>DOSE:</b> 2.5 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892564

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<b>ORGAN AND ACCOUNTABLE SITE STATUS</b>			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

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<b>PRIMARY CAUSE OF DEATH</b>	-
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 72

TRT#: 2

SEX: Male

DAY ON TEST: 736

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892565

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Note: [ CARDIOMYOPATHY ] TGLs = 7-13			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
		Hepatodiaphragmatic Nodule	
		Mixed Cell Focus	
Note: [ MIXED CL FOCUS ] TGLs = 8-6.1			
Note: [ CLEAR CL FOCUS ] TGLs = 9-6.2			
[ Basophilic Focus TGLS = 5-6.1 ]			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Marked
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Moderate
Note: [ ADENOMA ] TGLs = 6-8			
Preputial GI			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 72

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 736

**HISTO:** 892565

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: TGL 1 NORMAL ON MICRO EXAM.

Sem Ves

Note: TGL 4 NORMAL ON MICRO EXAM.

Spleen

Stomach, Forestomach

Testes

Interstit Cell

Seminif Tub

Fibrosis

Hyperkeratosis

Hyperplasia

Adenoma

Atrophy

Minimal

Minimal

Basal Cell, Minimal

Moderate

Note: [ ATROPHY ] TGLs = 3-7

Note: [ ADENOMA ] TGLs = 2-7

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 73

TRT#: 2

SEX: Male

DAY ON TEST: 736

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892566

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Spleen	Stomach, Forestomach
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 10-6.1 ]			
Lung	Alveolar Epith	Hyperplasia	Mild
[ Hyperplasia TGLS = 7-2 ]	Mediastinum	Schwannoma Malignant	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 6-12			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Moderate
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 9-10			
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 73

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892566

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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[ Adenoma TGLS = 1-7,2-7 ]

Thymus

Schwannoma Malignant

Metastatic (Uncertain Primary Site)

Note: [ SCHWANNOMA MAL ] TGLs = 5,8-3.1

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**PRIMARY CAUSE OF DEATH**

-

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Animal Note: MANY TISSUES CONGESTED.

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 74

TRT#: 2

SEX: Male

DAY ON TEST: 736

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892567

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Skeletal Muscle
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Preputial GI			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Skin	Subcut Tiss	Lipoma	
Note: [ LIPOMA ] TGLs = 1-10.1			
Spleen		Leukemia Mononuclear	
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 74

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 736

**HISTO:** 892567

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Animal Note: TGL#2 NORMAL ON MICRO EXAM.

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 75

TRT#: 2

SEX: Male

DAY ON TEST: 615

DOSE: 2.5 ML/KG

DISP: Natural Death

HISTO: 892568

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Ear	Epididymis	Esophagus
Intestine Large, Colon	Intestine Small, Duodenum	Islets, Pancreatic	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Stomach, Forestomach	Thyroid Gland	Trachea	

MISSING

Mammary Gland	Parathyroid Gland	Pituitary Gland
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AUTO PRECLUDES DIAG.

Intestine Large, Cecum	Intestine Large, Rectum	Intestine Small, Ileum	Intestine Small, Jejunum
Urinary Bladder			

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
Note: [ HDN ]	TGLs = 7-6.1		
Note: [ LEUKEMIA MONUC ]	TGLs = 8-6+6.1,13-6+6.1		
Lung		Leukemia Mononuclear	
Lymph Node	Lumbar	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 3-9.1,6-8,9-15,10-3,14-9		
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 3-9.1,6-8,9-15,10-3,14-9		
Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01  
Test Type: CHRONIC  
Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA  
Test Compound: Safflower oil  
CAS Number: 8001-23-8

Date Report Requested: 10/19/2014  
Time Report Requested: 11:16:12  
First Dose M/F: NA / NA  
Lab: TSI MASON

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ANIMAL ID: 75	TRT#: 2	SEX: Male	DAY ON TEST: 615
	DOSE: 2.5 ML/KG	DISP: Natural Death	HISTO: 892568

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ORGAN AND ACCOUNTABLE SITE STATUS

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Note: [ LEUKEMIA MONUC ] TGLs = 3-9.1,6-8,9-15,10-3,14-9			
Nose		Foreign Body	Mild
		Fungus	Mild
		Inflammation	Acute, Mild
		Leukemia Mononuclear	
Pancreas		Leukemia Mononuclear	
Skin	Subcut Tiss	Fibroma	
Note: [ FIBROMA ] TGLs = 1-16			
Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 11-3.1+3.2,12-3.1+3.2			
Note: [ LEUKEMIA MONUC ] TGLs = 4-3.1+3.2,5-3.1+3.2,			
Stomach, Glandular		Erosion	Mild
Note: [ EROSION ] TGLs = 15-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			
Thymus		Leukemia Mononuclear	
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 76

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892569

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large, Cecum	Intestine Large, Colon
Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Intestine Large, Rectum		Fibrous Histiocytoma	Metastatic (Skin)
Islets, Pancreatic		Adenoma	
Kidney		Degeneration	Hyaline, Moderate
		Nephropathy	Minimal
Liver		Fibrous Histiocytoma	Metastatic (Skin)
Note: [ FIB HISTIOCYT ] TGLs = 3-6.1			
Lung		Fibrous Histiocytoma	Metastatic (Skin)
		Infiltration Cellular	Histiocyte, Minimal
Mesentery	Fat	Necrosis	Mild
Note: [ NECROSIS ] TGLs = 4-17+17.1			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Moderate
Note: [ ANGIECTASIS ] TGLs = 8-8			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 76

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735

**HISTO:** 892569

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Skeletal Muscle

Fibrous Histiocytoma

Metastatic (Skin)

Skin

Fibrous Histiocytoma

Note: [ FIB HISTIOCYT ] TGLs = 5-10+14,6-15+15.1,7-16

Spleen

Pigmentation

Mild

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 77

TRT#: 2

SEX: Male

DAY ON TEST: 708

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 892570

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Ear	Epididymis	Esophagus
Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Intestine Small, Ileum	Intestine Small, Jejunum	Islets, Pancreatic	Liver
Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland	Pituitary Gland
Preputial Gland	Prostate	Seminal Vesicle	Skeletal Muscle
Skin	Stomach, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Lymph Node, Mandibular

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Lung		Infiltration Cellular	Histiocyte, Minimal
	[ Infiltration Cellular TGLS = 5-2+3 ]		
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Pancreas	Acinus	Atrophy	Moderate
Salivary Glands		Hyperplasia	Mild
		Inflammation	Chronic, Mild
	Note: [ HYPERPLASIA ] TGLs = 3-9		
	Note: [ INFLAMMATION ] TGLs = 3-9		
Spleen		Hematopoietic Cell Proliferation	Mild
Testes	Bilateral, Interstit Cell	Adenoma	
	Note: [ ADENOMA ] TGLs = 1-7,2-7		
Zymbal's Gland		Carcinoma	
	Note: [ CARCINOMA ] TGLs = 4-15+15.1		

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 77

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 708

**DOSE:** 2.5 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892570

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 78

TRT#: 2

SEX: Male

DAY ON TEST: 462

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881435

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Liver	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	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
Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 79

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892571

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 5-6+6.1,6-6+6.1			
Lung		Infiltration Cellular	Histiocyte, Minimal
Nose		Foreign Body	Minimal
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Moderate
		Squamous Cell Papilloma	
Pancreas	Acinus	Atrophy	Mild
Pharynx	Palate	Squamous Cell Carcinoma	
Pituitary Gland	Pars Distalis	Adenoma	
Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Prostate		Hyperplasia	Mild
Salivary Glands		Hyperplasia	Minimal
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 79

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892571

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen  
Stomach, Forestomach

Leukemia Mononuclear

Hyperkeratosis

Minimal

Hyperplasia

Basal Cell, Minimal

Testes  
Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7,3-7

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 80

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892572

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
		Pheochromocytoma Benign	
Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Note: [ NEPHROPATHY ] TGLs = 6-4			
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-6+6.1+6.2			
Lung		Leukemia Mononuclear	
Nose		Foreign Body	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 5-12			
Pancreas	Acinus	Atrophy	Minimal
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 4-3 ]			
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 80

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892572

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 1-7,2-7

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PRIMARY CAUSE OF DEATH -

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Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

Animal Note: NOT IN SAME GLAND

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

<b>ANIMAL ID:</b> 81	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 461
	<b>DOSE:</b> 2.5 ML/KG	<b>DISP:</b> Scheduled Sacrifice	<b>HISTO:</b> 881436

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Liver	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	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	Skin		
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Nose		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Minimal
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH	-		
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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 82

TRT#: 2

SEX: Male

DAY ON TEST: 461

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881437

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Intestine Small, 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**

Intestine Small, Ileum		Fibrosis	Mild
Kidney		Nephropathy	Minimal
Liver		Necrosis	Minimal
Note: [ NECROSIS ] TGLs = 1-6			
Lung		Infiltration Cellular	Histiocyte, Minimal
Note: CONGESTION			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			

PRIMARY CAUSE OF DEATH

-

Animal Note: INFLAMMATORY CELLS AND FIBROSIS IN SUB MUCOSA

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 83

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892573

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Pituitary Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 6-6+6.1			
Note: [ BASOPH FOCUS ] TGLs = 4-6+6.1			
Lymph Node	Mediastinal	Pigmentation	Minimal
Note: [ PIGMENT ] TGLs = 5-3			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 2-14			
Nose	Respirat Epith	Foreign Body	Mild
		Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Spleen		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 83	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 735
	<b>DOSE:</b> 2.5 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892573

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes	Bilateral, Interstit Cell	Adenoma
Note: [ ADENOMA ] TGLs = 1-7		
Thyroid Gland	C Cell	Adenoma

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 84

TRT#: 2

SEX: Male

DAY ON TEST: 693

DOSE: 2.5 ML/KG

DISP: Natural Death

HISTO: 892574

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Mild
Heart		Cardiomyopathy	Moderate
Int Lg Cecum			
Note: NO MICRO REASON FOR LARGE CECUM TGL#7			
Kidney		Nephropathy	Moderate
Note: A FEW SCLEROSED GLOMERULI [ Nephropathy TGLS = 5-4 ]			
Liver		Basophilic Focus	Minimal
Note: [ BASOPH FOCUS ] TGLs = 8-6 Note: CLUMPS OF PIGMENT Note: NO MICRO REASON FOR SMALL LIVER TGL#2			
Lung			
Note: TGL#6 PALE FOCI NOT SEEN ON MICRO EXAM			
Nose		Foreign Body	Moderate
	Respirat Epith	Hyperplasia Inflammation	Mild Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 84	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 693
	<b>DOSE:</b> 2.5 ML/KG	<b>DISP:</b> Natural Death	<b>HISTO:</b> 892574

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen [ Pigmentation TGLS = 4-3 ]		Pigmentation	Moderate
Stomach, Forestomach		Hyperkeratosis	Minimal
Stomach, Glandular Note: [ EROSION ] TGLs = 9-5+5.1		Hyperplasia	Basal Cell, Minimal
Testes [ Adenoma TGLS = 1-7 ]	Bilateral, Interstit Cell	Erosion	Mild
		Adenoma	

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**PRIMARY CAUSE OF DEATH** -

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Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

Animal Note: NOT IN SAME GLAND

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 85

TRT#: 2

SEX: Male

DAY ON TEST: 600

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 892575

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Lymph Node	Mediastinal	Pigmentation	Minimal
Note: [ PIGMENT ] TGLs = 7-3.1			
Lymph Node, Mandibular		Angiectasis	Mild
		Pigmentation	Mild
Note: [ ANGIECTASIS ] TGLs = 1-9			
Note: [ PIGMENT ] TGLs = 7-3.1			
Note: [ ANGIECTASIS ] TGLs = 10-8			
Lymph Node, Mesenteric		Angiectasis	Minimal
Note: [ ANGIECTASIS ] TGLs = 1-9			
Note: [ ANGIECTASIS ] TGLs = 10-8			
Mesentery	Fat	Hemorrhage	Mild
		Inflammation	Chronic Active, Moderate
Note: NUMEROUS LANGHANS GIANT CELLS			
Note: [ INFLAMMATION ] TGLs = 4-8+14+14.1			
Nose		Foreign Body	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 85	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 600
	<b>DOSE:</b> 2.5 ML/KG	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 892575

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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		Fungus	Minimal
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 8-12			
Pancreas	Acinus	Atrophy	Minimal
Spleen		Hematopoietic Cell Proliferation	Moderate
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Mild
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			
Tissue NOS	Abdominal	Ectopic Tissue	
Note: [ ECT TISSUE ] TGLs = 9-15.1			
Note: POSSIBLE MESONEPHRIC DUCT REMNANT			

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 86

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892576

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
[ Nephropathy TGLS = 5-4 ]			
Liver		Basophilic Focus	
[ Basophilic Focus TGLS = 8-6+6.1 ]		Clear Cell Focus	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 6-12			
Pancreas	Acinus	Atrophy	Mild
	Artery	Inflammation	Chronic Active, Moderate
Note: [ INFLAMMATION ] TGLs = 7-9.1			
Prostate		Hyperplasia	Minimal
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Skin		Cyst Epithelial Inclusion	
Note: [ CYST EPITH INC ] TGLs = 1-14			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 86

**TRT#:** 2  
**DOSE:** 2.5 ML/KG

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

**DAY ON TEST:** 735  
**HISTO:** 892576

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes  
Note: [ ADENOMA ] TGLs = 2-7,3-7

Bilateral, Interstit Cell

Adenoma

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 87

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Natural Death

DAY ON TEST: 710

HISTO: 892577

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Brain
Epididymis	Esophagus	Intestine Small, Duodenum	Intestine Small, Ileum
Islets, Pancreatic	Liver	Lung	Lymph Node, Mesenteric
Mammary Gland	Parathyroid Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Stomach, Glandular	Trachea

MISSING

Thymus

AUTO PRECLUDES DIAG.

Bone Marrow	Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum
Intestine Small, Jejunum	Thyroid Gland		

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
Note: [ NEPHROPATHY ] TGLs = 9-4+4.1			
Liver			
Note: TGL#8 PERFORATION PROBABLE ARTIFACT			
Lymph Node	Mediastinal	Pigmentation	Mild
Note: [ PIGMENT ] TGLs = 10-3			
Lymph Node, Mandibular		Ectasia	Mild
Note: [ ECTASIA ] TGLs = 1-9			
Nose		Foreign Body	Mild
		Fungus	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Note: [ FUNGUS ] TGLs = 7-12			
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
Note: [ ADENOMA ] TGLs = 6-8			
Preputial Gland		Abscess	Mild

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 87

TRT#: 2

SEX: Male

DAY ON TEST: 710

DOSE: 2.5 ML/KG

DISP: Natural Death

HISTO: 892577

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ ABSCESS ] TGLs = 13-10 Sem Ves Note: TGL 12 NORMAL ON MICRO EXAM.			
Skeletal Muscle Note: [ RHABDOMYOSARC ] TGLs = 4-14		Rhabdomyosarcoma	
Spleen Stom Gland Note: TGL#11, AUTOLYSIS PRECLUDES DIAGNOSIS, GLANDULAR		Pigmentation	Moderate
Stomach, Forestomach  Note: [ HYPERPLASIA ] TGLs = 5-5.1		Hyperkeratosis Hyperplasia	Minimal Basal Cell, Mild
Testes Note: [ ADENOMA ] TGLs = 2-7,3-7	Bilateral, Interstit Cell	Adenoma	
Urinary Bladder	Transit Epithe	Hyperplasia	Moderate

PRIMARY CAUSE OF DEATH

-

Animal Note: PROBABLE HEALED ULCER OR AUTOLYSIS

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 88

TRT#: 2

SEX: Male

DAY ON TEST: 462

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881438

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Lung			
Note: CONGESTION			
Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
Spleen			
Note: CONGESTION			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Minimal
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			
[ Hyperplasia TGLS = 1-7 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 89

TRT#: 2

SEX: Male

DAY ON TEST: 461

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881439

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Liver	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	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

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Lung			
Note: CONGESTION			
Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
Spleen			
Note: CONGESTION			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Minimal
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			
[ Hyperplasia TGLS = 1-7 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 90

TRT#: 2

SEX: Male

DAY ON TEST: 462

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881440

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Liver	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	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
Nose		Fungus	Minimal
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 91

TRT#: 2

SEX: Male

DAY ON TEST: 618

DOSE: 2.5 ML/KG

DISP: Natural Death

HISTO: 892580

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum
Islets, Pancreatic	Lung	Parathyroid Gland	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Mammary Gland

AUTO PRECLUDES DIAG.

Intestine Large, Rectum

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 6-6+6.1			
Lymph Node	Pancreatic	Angiectasis	Mild
Note: [ ANGIECTASIS ] TGLs = 5-9.1,7-9			
Lymph Node, Mandibular		Angiectasis	Mild
Note: [ ANGIECTASIS ] TGLs = 5-9.1,7-9			
Lymph Node, Mesenteric		Angiectasis	Minimal
Note: [ ANGIECTASIS ] TGLs = 5-9.1,7-9			
Nose		Foreign Body	Mild
		Fungus	Mild
		Inflammation	Acute, Mild
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Atrophy	Minimal
Spleen		Hematopoietic Cell Proliferation	Moderate
		Pigmentation	Moderate
[ Hematopoietic Cell Proliferation TGLS = 2-3 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 91

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 618

**DOSE:** 2.5 ML/KG

**DISP:** Natural Death

**HISTO:** 892580

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,4-7

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 92

TRT#: 2

SEX: Male

DAY ON TEST: 491

DOSE: 2.5 ML/KG

DISP: Natural Death

HISTO: 892579

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
Parathyroid Gland	Preputial Gland	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Stomach, Forestomach	Stomach, Glandular
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	Multiple
		Leukemia Mononuclear	
Note: [ HDN ] TGLs = 7-6.1,8-6.1			
Lung		Leukemia Mononuclear	
Lymph Node	Axillary	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-9,3-8,5-9.1,11-3.1			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-9,3-8,5-9.1,11-3.1			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-9,3-8,5-9.1,11-3.1			
Mesentery		Leukemia Mononuclear	
	Fat	Necrosis	Moderate

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 92

TRT#: 2

SEX: Male

DAY ON TEST: 491

DOSE: 2.5 ML/KG

DISP: Natural Death

HISTO: 892579

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ NECROSIS ] TGLs = 4-14  
Nose

Foreign Body

Moderate

Fungus

Moderate

Respirat Epith

Hyperplasia

Mild

Inflammation

Acute, Moderate

Respirat Epith

Metaplasia

Squamous, Moderate

Note: [ FUNGUS ] TGLs = 10-12  
Pancreas

Atrophy

Mild

Pituitary Gland

Acinus

Angiectasis

Mild

Pars Distalis

Hyperplasia

Mild

Note: [ ANGIECTASIS ] TGLs = 9-8  
Preputial GI

Note: TGL 13 NORMAL ON MICRO EXAM.

Prostate

Leukemia Mononuclear

Spleen

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 6-3.2

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 12-7

Thymus

Leukemia Mononuclear

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 93

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Natural Death

DAY ON TEST: 683

HISTO: 892580

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lymph Node, Mesenteric	Mammary Gland
Pancreas	Parathyroid Gland	Seminal Vesicle	Skeletal Muscle
Skin	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
		Thrombosis	Moderate
Note: [ THROMBUS ] TGLs = 8-13-13.1,15-13+13.1			
Kidney		Nephropathy	Minimal
Liver	Centrilobular	Degeneration	Moderate
		Necrosis	Mild
Note: [ NECROSIS ] TGLs = 7-6			
Note: [ DEGEN ] TGLs = 6-6			
Lung		Infiltration Cellular	Histiocyte, Minimal
[ Infiltration Cellular TGLS = 9-2+3 ]			
Lymph Node, Mandibular	Lymphatic	Ectasia	Moderate
Note: [ ECTASIA ] TGLs = 2-9			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 14-12			
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Cyst	
Note: [ CYST ] TGLs = 10-8			
Preputial Gland	Bilateral	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

**ANIMAL ID:** 93

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 683

**DOSE:** 2.5 ML/KG

**DISP:** Natural Death

**HISTO:** 892580

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ ADENOMA ] TGLs = 1-10.1+10.2			
Prostate		Inflammation	Chronic, Moderate
Note: [ INFLAMMATION ] TGLs = 4-7.1			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen		Hematopoietic Cell Proliferation	Moderate
[ Hematopoietic Cell Proliferation TGLS = 5-3 ]			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Stomach, Glandular		Erosion	Mild
Note: [ EROSION ] TGLs = 16-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7			
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 94

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 679

HISTO: 892581

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	Parathyroid Gland
Salivary Glands	Seminal Vesicle	Skin	Stomach, Glandular
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Adrenal Cortex	Adrenal Medulla
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OBSERVATIONS

Blood		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 9-1			
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Note: [ LEUKEMIA MONUC ] TGLs = 10-4			
Liver		Basophilic Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-6			
Lung	Alveolus	Foreign Body	Minimal
	Alveolus	Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 11-2+3			
Note: FOREIGN MATERIAL RESEMBLING OIL GLOBULES SEEN.			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 3-9.1,4-8+8.1			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 3-9.1,4-8+8.1			

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

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<b>ANIMAL ID:</b> 94	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 679
	<b>DOSE:</b> 2.5 ML/KG	<b>DISP:</b> Moribund Sacrifice	<b>HISTO:</b> 892581

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 3-9,1,4-8+8.1		
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Mild
		Leukemia Mononuclear	
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Cyst	
		Leukemia Mononuclear	
Preputial Gland		Abscess	Mild
Prostate		Hyperplasia	Mild
Skeletal Muscle		Leukemia Mononuclear	
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 2-3		
Stomach, Forestomach		Hyperkeratosis	Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ]	TGLs = 1-7		
Thymus		Leukemia Mononuclear	
Trachea			
Note: TGL#6 OIL IN LUNGS ONLY. WASHED OUT DURING PROCESSING.			

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 95

TRT#: 2

SEX: Male

DAY ON TEST: 462

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881441

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Intestine Small, Ileum	Intestine Small, Jejunum	Islets, Pancreatic	Kidney
Liver	Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric
Mammary Gland	Parathyroid Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea

OBSERVATIONS

Nose		Fungus	Moderate
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Mild
Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-13 ]			
Spleen		Hematopoietic Cell Proliferation	Marked
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 2-7			
Note: [ HYPERPLASIA ] TGLs = 3-7			
Urinary Bladder		Calculus Gross Observation	
		Calculus Micro Observation Only	
Note: [ CALCUS MIC OBS ] TGLs = 4-9			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 96

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892582

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	Parathyroid Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-13			
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
		Leukemia Mononuclear	
Liver			
Note: [ LEUKEMIA MONUC ] TGLs = 11-6+6.1			
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 10-2+2.1+3			
Lymph Node	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-9.1			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-9.1			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-9.1			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 96

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892582

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ FUNGUS ] TGLs = 9-12.1

Pancreas Acinus

Atrophy

Mild

Pituitary Gland

Leukemia Mononuclear

Preputial GI

Note: TGL 2 NORMAL ON MICRO EXAM.

Salivary Glands Duct

Metaplasia

Squamous, Minimal

Sem Ves

Note: TGL 4 NORMAL ON MICRO EXAM.

Spleen

Fibrosis

Minimal

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 5-3

Testes Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 3-7

Thymus

Leukemia Mononuclear

Thyroid GI

Note: TGL#8 NO MICRO REASON FOR DARK COLOR

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 97

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 892583

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Moderate
[ Nephropathy TGLS = 3-4 ]			
Liver		Basophilic Focus	
Lung		Infiltration Cellular	Histiocyte, Moderate
		Inflammation	Chronic, Mild
Note: PROBABLE INTERSTITIAL FIBROSIS			
[ Infiltration Cellular TGLS = 4-3 ]			
Lymph Node	Pancreatic	Hyperplasia	Lymphoid, Mild
Note: [ HYPERPLASIA ] TGLs = 8-9.1			
Nose		Foreign Body	Moderate
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 6-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
Note: [ ADENOMA ] TGLs = 5-8			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 97

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892583

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Preputial GI

Note: TGL 1 NORMAL ON MICRO EXAM.

Spleen

Stomach, Forestomach

Testes

Note: [ ADENOMA ] TGLs = 2-7

Urinary Bladder

Bilateral, Interstit Cell

Pigmentation

Hyperkeratosis

Hyperplasia

Adenoma

Mild

Minimal

Basal Cell, Minimal

Calculus Gross Observation

Calculus Micro Observation Only

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Note: [ CALCUS MIC OBS ] TGLs = 7-9

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 98

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 892584

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland	Preputial Gland
Salivary Glands	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 5-6+6.1			
Lymph Node	Pancreatic	Infiltration Cellular	Histiocyte, Mild
Note: [ INFILTRAT CELL ] TGLs = 6-9.1			
Nose		Foreign Body	Moderate
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 4-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal
	Artery	Inflammation	Chronic Active, Mild
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
Note: [ ADENOMA ] TGLs = 3-8			
Spleen		Pigmentation	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 98	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 735
	<b>DOSE:</b> 2.5 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892584

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes	Interstit Cell	Adenoma	
	Seminif Tub	Atrophy	Moderate
	Interstit Cell	Hyperplasia	Minimal

Note: [ ATROPHY ] TGLs = 1-7  
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS  
Note: [ ADENOMA ] TGLs = 2-7

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 99

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892585

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lymph Node, Mandibular	Lymph Node, Mesenteric	Parathyroid Gland	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	Multiple
Note: [ ADENOMA ] TGLs = 6-9.1+9.2			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-6+6.1			
Lung		Leukemia Mononuclear	
Mammary Gland		Galactocele	
Note: [ GALACTOCELE ] TGLs = 1-10			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Adenoma	
	Acinus	Hyperplasia	Moderate
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-3			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 99

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892585

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 100

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 892586

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Lymph Node, Mandibular		Angiectasis	Minimal
		Pigmentation	Mild
Note: [ PIGMENT ] TGLs = 1-9			
Mesentery	Fat	Mineralization	Minimal
Note: [ MINERALIZATION ] TGLs = 3-14			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 5-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Marked

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 100

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892586

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 7-9.2

Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 2-3.1 ]

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 6-7

Thyroid Gland

Follicular Cel

Adenoma

Note: [ ADENOMA ] TGLs = 4-2

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 101

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 892587

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland	Pituitary Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Stomach, Forestomach	Stomach, Glandular	Trachea
Urinary Bladder			

MISSING

Thymus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Mixed Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 5-6+6.1+6.2			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
Pituitary G1			
Note: TGL#3 CUT THROUGH IN BLOCK			
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 4-10			
Spleen		Pigmentation	Moderate
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 101

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892587

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 1-7,2-7

Thyroid Gland

C Cell

Adenoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 102

TRT#: 2

SEX: Male

DAY ON TEST: 485

DOSE: 2.5 ML/KG

DISP: Natural Death

HISTO: 892588

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lymph Node, Mandibular	Lymph Node, Mesenteric
Pancreas	Parathyroid Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Testes	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
	Atrium	Dilatation	Moderate
Note: [ DILATATION ] TGLs = 8-13.1			
Kidney		Nephropathy	Moderate
Note: [ NEPHROPATHY ] TGLs = 7-4			
Liver		Fatty Change	Focal, Mild
		Necrosis	Mild
Note: [ NECROSIS ] TGLs = 9-6			
Note: [ FATTY CHANGE ] TGLs = 4-6			
Lung		Congestion	Marked
Note: [ CONGESTION ] TGLs = 5-2+3			
Note: TGL#5 CONGESTION WITH INCOMPLETE INFUSION OF FIXATIVE			
Mammary Gland		Galactocele	
Nose		Foreign Body	Mild
		Fungus	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
	Pars Distalis	Adenoma	
Pituitary Gland			
Note: [ ADENOMA ] TGLs = 6-8			
Spleen		Pigmentation	Moderate
Note: [ PIGMENT ] TGLs = 1-3			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 102

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Natural Death

**DAY ON TEST:** 485

**HISTO:** 892588

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Stomach, Forestomach

Hyperkeratosis

Mild

Hyperplasia

Basal Cell, Mild

Ulcer

Mild

Note: [ ULCER ] TGLs = 2-5

Note: [ HYPERPLASIA ] TGLs = 10-5.1

Stomach, Glandular

Mucosa

Hyperplasia

Diffuse, Marked

Note: [ HYPERPLASIA ] TGLs = 10-5.1

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 103

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 892589

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal 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	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Esophagus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Note: [ CARDIOMYOPATHY ] TGLs = 8-13			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 9-6+6.1+6.2			
Lung		Infiltration Cellular	Histiocyte, Minimal
Nose		Foreign Body	Minimal
		Inflammation	Acute, Mild
Pituitary Gland	Pars Intermed	Angiectasis	Minimal
Note: [ ANGIECTASIS ] TGLs = 7-8			
Preputial Gland		Adenoma	
[ Adenoma TGLS = 3-10 ]			
Sem Ves			
Note: TGL 6 NORMAL ON MICRO EXAM.			
Skin	Subcut Tiss	Fibrosarcoma	
		Keratoacanthoma	
Note: [ FIBROSARC ] TGLs = 2-15			
Note: [ KERATOACANTHMA ] TGLs = 1-14			
Spleen		Angiectasis	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 103

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892589

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes

Bilateral, Interstit Cell

Pigmentation

Mild

Note: [ ADENOMA ] TGLs = 4-7,5-7

Adenoma

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 104

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892590

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Thymus

OBSERVATIONS

Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Moderate
		Leukemia Mononuclear	
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Hepatodiaphragmatic Nodule	
		Leukemia Mononuclear	
Note: [ HDN ] TGLs = 8-6.1			
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-9			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-9			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-9			
Mesentery	Fat	Necrosis	Mild
Note: [ NECROSIS ] TGLs = 6-14			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

**ANIMAL ID:** 104

**TRT#:** 2  
**DOSE:** 2.5 ML/KG

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

**DAY ON TEST:** 735  
**HISTO:** 892590

**ORGAN AND ACCOUNTABLE SITE STATUS**

Preputial GI Note: TGL 1 NORMAL ON MICRO EXAM.	Respirat Epith	Inflammation Metaplasia	Acute, Marked Squamous, Mild
Sem Ves Note: TGL 4 NORMAL ON MICRO EXAM.			
Spleen Note: [ LEUKEMIA MONUC ] TGLs = 5-3		Leukemia Mononuclear	
Testes Note: [ ADENOMA ] TGLs = 2-7,3-7	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Moderate
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 105

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892591

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Spleen	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Epididymis		Mesothelioma Malignant	Metastatic (Testes)
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Lung		Congestion	Mild
Note: [ CONGESTION ] TGLs = 5-3			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ ADENOMA ] TGLs = 4-8			
Preputial Gland		Inflammation	Acute, Mild
Note: [ INFLAMMATION ] TGLs = 6-10			
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:12  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 105

**TRT#:** 2  
**DOSE:** 2.5 ML/KG

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

**DAY ON TEST:** 735  
**HISTO:** 892591

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Seminif Tub  
Interstit Cell  
Tunic

Atrophy  
Hyperplasia  
Mesothelioma Malignant

Moderate  
Mild

Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS

Note: [ ADENOMA ] TGLs = 2-7

Note: [ ATROPHY ] TGLs = 1-7

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 106

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 892592

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Preputial Gland	Prostate	Seminal Vesicle
Skeletal Muscle	Skin	Spleen	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 6-6			
Lung		Infiltration Cellular	Histiocyte, Mild
Note: ALSO CHOLESTEROL CRYSTALS [ Infiltration Cellular TGLS = 7-2+2.1+3 ]			
Nose		Foreign Body	Minimal
		Fungus	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Preputial GI			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 106

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 736

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892592

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

-

Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

Animal Note: NOT IN SAME GLAND

Animal Note: NO MICRO REASON FOR FOCUS TGL5

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 107

TRT#: 2

SEX: Male

DAY ON TEST: 727

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 892593

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Mild
Note: [ PHEOCHROM BGN ] TGLs = 5-8			
Heart		Cardiomyopathy Mineralization	Mild Minimal
Note: [ CARDIOMYOPATHY ] TGLs = 9-13			
Kidney		Nephropathy	Moderate
Liver		Fatty Change Pigmentation	Focal, Moderate Hemosiderin, Mild
Note: [ FATTY CHANGE ] TGLs = 6-6			
Note: PIGMENT IRON POSITIVE AND FAST NEGATIVE			
Lung	Interstitial	Infiltration Cellular Inflammation Mineralization	Histiocyte, Mild Chronic Active, Minimal Minimal
Note: [ INFLAMMATION ] TGLs = 12-2+2.1+3			
Note: [ INFILTRAT CELL ] TGLs = 10-2+2.1+3			
Note: SYNCITIAL CELLS AND INTERSTITIAL PNEUMONIA			
Lymph Node	Mediastinal Mediastinal	Angiectasis Inflammation	Minimal Acute, Minimal
Note: [ ANGIECTASIS ] TGLs = 8-3			

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 107

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Moribund Sacrifice

DAY ON TEST: 727

HISTO: 892593

ORGAN AND ACCOUNTABLE SITE STATUS

Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Minimal
Note: NODULE NOT FOUND ON MICRO EXAM TGL#4			
Pituitary Gland	Pars Distalis	Cyst	
Note: [ CYST ] TGLs = 11-8			
Spleen		Pigmentation	Hemosiderin, Mild
Stomach, Glandular		Erosion	Minimal
Note: [ EROSION ] TGLs = 13-5			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

PRIMARY CAUSE OF DEATH

-

Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

Animal Note: NOT IN SAME GLAND

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 108

TRT#: 2

SEX: Male

DAY ON TEST: 398

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 881464

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Kidney		Nephropathy	Minimal
Nose		Foreign Body	Mild
		Inflammation	Acute, Mild
Pancreas	Acinus	Hyperplasia	Minimal
Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-13 ]			
Spleen		Hematopoietic Cell Proliferation	Mild
Testes	Interstit Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 109

TRT#: 2

SEX: Male

DAY ON TEST: 461

DOSE: 2.5 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881442

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Lung			
Note: CONGESTION			
Nose		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Mild
Spleen			
Note: CONGESTION			
Testes	Bilateral, Interstit Cell	Adenoma	
Urinary Bladder		Calculus Gross Observation	
		Calculus Micro Observation Only	

Note: [ CALCUS MIC OBS ] TGLs = 1-9

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 110

TRT#: 2

SEX: Male

DAY ON TEST: 736

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892594

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 6-6			
Lymph Node, Mandibular		Ectasia	Mild
Note: [ ECTASIA ] TGLs = 1-9			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Note: [ FUNGUS ] TGLs = 5-12			
Pancreas	Acinus	Atrophy	Minimal
Preputial GI			
Note: TGL 2 NORMAL ON MICRO EXAM.			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7,4-7			
Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 111

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892595

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	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
Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Esophagus

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Fatty Change	Focal, Mild
Note: [ FATTY CHANGE ] TGLs = 4-6			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
Preputial GI			
Note: TGL 1 NORMAL ON MICRO EXAM.			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Skin		Cyst Epithelial Inclusion	
Note: [ CYST EPITH INC ] TGLs = 6-15			
Spleen		Pigmentation	Mild
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:12

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

**Lab:** TSI MASON

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**ANIMAL ID:** 111

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735

**HISTO:** 892595

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 2-7,3-7  
Zymbal's Gland

Carcinoma

Note: [ CARCINOMA ] TGLs = 5-14.1

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:12

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 112

TRT#: 2

SEX: Male

DAY ON TEST: 736

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892596

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lymph Node, Mandibular	Lymph Node, Mesenteric	Parathyroid Gland	Preputial Gland
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Leukemia Mononuclear	
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-2+2.1+3			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-9.1+9.2			
Mammary Gland		Fibroadenoma	
Note: [ FIBROADENOMA ] TGLs = 1-14+14.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 5-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Cyst	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

**ANIMAL ID:** 112

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 736

**HISTO:** 892596

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ CYST ] TGLs = 4-8			
Prostate		Hyperplasia	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen		Leukemia Mononuclear	
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7.2			
Thymus		Leukemia Mononuclear	
Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 113

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 736

HISTO: 892597

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Mild
Liver		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 5-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Note: [ HYPERPLASIA ] TGLs = 3-8			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen		Pigmentation	Moderate
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH -

Animal Note: TGL#4 PANCREATIC LN NOT LARGE ON MICRO EXAM

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 114

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892598

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Pancreas	Parathyroid Gland	Prostate	Seminal Vesicle
Skeletal Muscle	Skin	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Adrenal Medulla

OBSERVATIONS

Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 6-6+6.1+6.2,7-6+6.1+6.2		
Lung		Leukemia Mononuclear	
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Note: [ HYPERPLASIA ]	TGLs = 4-8		
Preputial Gland		Abscess	Mild
Note: [ ABSCESS ]	TGLs = 5-10		
Salivary Glands	Duct	Metaplasia	Squamous, Minimal

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 114

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892598

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen

[ Leukemia Mononuclear TGLS = 3-3.1 ]

Leukemia Mononuclear

Testes

Note: [ ADENOMA ] TGLs = 1-7,2-7

Bilateral, Interstit Cell

Adenoma

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 115

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 892599

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Bone Marrow	Brain	Esophagus
Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Intestine Small, Ileum	Intestine Small, Jejunum	Mammary Gland	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
Blood		Leukemia Mononuclear	
Epididymis		Mesothelioma Malignant	Metastatic (Testes)
Note: [ MESOTHELIO MAL ] TGLs = 5-7			
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
		Thrombosis	Moderate
Note: [ THROMBUS ] TGLs = 9-13			
Islets, Pancreatic		Hyperplasia	Moderate
Kidney		Nephropathy	Mild
Note: ALSO TUBULAR DEGENERATION			
Note: [ NEPHROPATHY ] TGLs = 8-4+4.1			
Liver		Fatty Change	Focal, Mild
		Pigmentation	Mild
Note: [ PIGMENT ] TGLs = 7-6			
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Pigmentation	Moderate
Lymph Node, Mandibular		Leukemia Mononuclear	
Lymph Node, Mesenteric		Leukemia Mononuclear	
Nose		Foreign Body	Mild

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 115

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892599

ORGAN AND ACCOUNTABLE SITE STATUS

	Respirat Epith	Fungus Hyperplasia Inflammation	Moderate Moderate Acute, Moderate
Pancreas	Respirat Epith	Metaplasia	Squamous, Mild
Pituitary Gland	Acinus	Adenoma	Multiple
Skin	Pars Distalis	Hyperplasia	Moderate
Note: [ MESOTHELIO MAL ] TGLs = 3-14	Scrotum	Mesothelioma Malignant	
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-3			
Stomach, Forestomach		Hyperkeratosis Hyperplasia Ulcer	Minimal Basal Cell, Mild Mild
Note: [ ULCER ] TGLs = 10-5+5.1			
Stomach, Glandular		Erosion	Mild
Testes	Bilateral, Interstit Cell Tunic	Adenoma Mesothelioma Malignant	
Note: [ MESOTHELIO MAL ] TGLs = 6-7			
Note: [ ADENOMA ] TGLs = 4-7			
Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 116

TRT#: 2

DOSE: 2.5 ML/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 735

HISTO: 892600

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lymph Node, Mandibular	Lymph Node, Mesenteric
Parathyroid Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Spleen	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 6-6			
Lung		Hemorrhage	Focal, Minimal
Note: [ HEMORRHAGE ] TGLs = 7-2.1			
Mammary Gland		Fibroadenoma	
Note: [ FIBROADENOMA ] TGLs = 1-14+14.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Moderate
	Artery	Inflammation	Chronic Active, Mild
Note: [ ATROPHY ] TGLs = 5-9.1			
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 2-10			
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 116

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 2.5 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892600

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 3-7

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 117

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892601

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Moderate
Liver		Basophilic Focus	
		Clear Cell Focus	
Nose		Foreign Body	Minimal
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Pancreas	Acinus	Atrophy	Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Moderate
Preputial Gland		Hyperplasia	Mild
Note: [ HYPERPLASIA ] TGLs = 4-10			
Spleen		Hematopoietic Cell Proliferation	Moderate
[ Hematopoietic Cell Proliferation TGLS = 3-3 ]			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 117

**TRT#:** 2

**DOSE:** 2.5 ML/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 735

**HISTO:** 892601

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 118

TRT#: 2

SEX: Male

DAY ON TEST: 614

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 892602

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Lymph Node, Mandibular	Salivary Glands
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-6			
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
Lymph Node, Mesenteric		Leukemia Mononuclear	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Moderate
Preputial Gland		Cyst	
Note: [ CYST ] TGLs = 6-10			
Spleen		Fibrosis	Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 3-3+3.1+3.2,4-3+3.1+3.2			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 118

**TRT#:** 2

**SEX:** Male

**DAY ON TEST:** 614

**DOSE:** 2.5 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892602

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 2-7

Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS

Thymus

Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 119

TRT#: 2

SEX: Male

DAY ON TEST: 735

DOSE: 2.5 ML/KG

DISP: Terminal Sacrifice

HISTO: 892603

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Parathyroid Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Stomach, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Mammary Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Lymph Node	Mediastinal	Pigmentation	Mild
Note: [ PIGMENT ] TGLs = 6-3			
Lymph Node, Mandibular		Hyperplasia	Lymphoid, Moderate
Note: [ HYPERPLASIA ] TGLs = 7-9			
Nose		Foreign Body	Minimal
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ ADENOMA ] TGLs = 5-8			
Preputial Gland		Abscess	Moderate
Note: [ ABSCESS ] TGLs = 1-10			
Sem Ves			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 119	<b>TRT#:</b> 2	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 735
	<b>DOSE:</b> 2.5 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892603

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: TGL 4 NORMAL ON MICRO EXAM.

Spleen		Pigmentation	Mild
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

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PRIMARY CAUSE OF DEATH

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Animal Note: TGL#8 MUCOSA APPEARS NORMAL ON MICRO EXAM

Animal Note: NO THICKENING

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 120

TRT#: 2

SEX: Male

DAY ON TEST: 634

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 892604

**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	Mammary Gland	Parathyroid Gland
Preputial Gland	Prostate	Seminal Vesicle	Skeletal Muscle
Skin	Thyroid Gland	Trachea	Urinary Bladder

**MISSING**

Thymus

**OBSERVATIONS**

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
		Pheochromocytoma Benign	
Blood		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-6			
Lung		Infiltration Cellular	Histiocyte, Mild
		Leukemia Mononuclear	
[ Infiltration Cellular TGLS = 3-2+3 ]			
Lymph Node	Axillary	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-3			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-3			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-3			
Nose		Foreign Body	Mild

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 120

TRT#: 2

SEX: Male

DAY ON TEST: 634

DOSE: 2.5 ML/KG

DISP: Moribund Sacrifice

HISTO: 892604

ORGAN AND ACCOUNTABLE SITE STATUS

	Respirat Epith	Fungus Hyperplasia Inflammation	Moderate Mild Acute, Moderate
Pancreas	Respirat Epith	Metaplasia	Squamous, Moderate
Pituitary Gland	Acinus	Atrophy	Mild
	Pars Distalis	Hyperplasia	Moderate
		Leukemia Mononuclear	
Preputial GI			
Note: TGL#5 WITHIN NORMAL LIMITS ON MICRO EXAM			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-3			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Stomach, Glandular		Erosion	Mild
Testes	Interstit Cell	Adenoma	
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 121

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892510

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
Lymph Node	Pancreatic	Hyperplasia	Lymphoid, Mild
Note: [ HYPERPLASIA ] TGLs = 6-9.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 5-12			
Pancreas	Acinus	Atrophy	Minimal
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Skin	Subcut Tiss	Fibroma	
[ Fibroma TGLS = 1-10.1 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 121

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892510

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Thyroid Gland

C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 122

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892511

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Adrenal Cortex		Hyperplasia	Minimal
Note: 1991 CONVERSION DISCREPANCY. ORIGINAL DIAGNOSIS SITE NOT SPECIFIED.			
Heart		Cardiomyopathy	Mild
Kidney		Cyst	
		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Fatty Change	Focal, Minimal
Note: [ BASOPH FOCUS ] TGLs = 4-6.1			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Adenoma	
Note: [ ADENOMA ] TGLs = 2-9.1			
Preputial Gland		Abscess	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 123

TRT#: 3

SEX: Male

DAY ON TEST: 165

DOSE: 5.0 MLK/KG

DISP: Moribund Sacrifice

HISTO: 881465

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Ear	Inflammation	Chronic Active, Moderate
Note: [ INFLAMMATION ] TGLs = 3-13		
Heart	Cardiomyopathy	Minimal
Nose	Foreign Body	Minimal
	Inflammation	Acute, Minimal
Preputial Gland	Cyst	Mild
Note: [ CYST ] TGLs = 1-10		
Spleen	Depletion Lymphoid	Mild
	Hematopoietic Cell Proliferation	Mild
Stom Gland		
Note: GLANDULAR PORTION NORMAL ON MICRO EXAM TGL#2		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 124

TRT#: 3

SEX: Male

DAY ON TEST: 613

DOSE: 5.0 MLK/KG

DISP: Moribund Sacrifice

HISTO: 892512

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Pituitary Gland	Thymus
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OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
Note: NUMEROUS MITOTIC FIGURES			
Lymph Node	Mediastinal	Infiltration Cellular	Polymorphnuclr, Mild
Note: [ INFILTRAT CELL ] TGLs = 5-3.1			
Mesentery		Abscess	Marked
Note: THE INTESTINE. AS THE SITE IS NOT CLEAR			
Note: PLANT MATERIAL IN ABSCESS. THIS LESION			
Note: IS PROBABLY A RESULT OF PERFORATION OF			
Note: [ ABSCESS ] TGLs = 4-5+5.1			
Note: IT IS ENTERED UNDER MESENTERY.			
Nose		Foreign Body	Mild
		Fungus	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 7-12			
Pituitary GI			
Note: TGL#6 CUT THROUGH IN BLOCK.			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 124

**TRT#:** 3  
**DOSE:** 5.0 MLK/KG

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

**DAY ON TEST:** 613  
**HISTO:** 892512

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Sem Ves			
Note: TGL 2 NORMAL ON MICRO EXAM.			
Spleen		Hematopoietic Cell Proliferation	Moderate
Note: [ HEMA CELL PROL ] TGLs = 3-3			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			

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**PRIMARY CAUSE OF DEATH**

-

Animal Note: MORE LIKE LYMPHADENITIS

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 125

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892513

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Skeletal Muscle
Skin	Spleen	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Necrosis	Minimal
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 4-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
Note: ADENOMA ON SLIDE #5			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

PRIMARY CAUSE OF DEATH

-

Animal Note: TGL#1 NO MICRO REASON FOR ENLARGEMENT

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 126

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892514

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Heart	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Mammary Gland	Parathyroid Gland	Thymus
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OBSERVATIONS

Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 3-14+14.1			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 4-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 127

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892515

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 5-12			
Pancreas	Acinus	Adenoma	Multiple
Note: [ ADENOMA ] TGLs = 3-9.1			
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 128

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892516

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Skeletal Muscle	Skin	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	Minimal
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 8-6.1			
Note: [ LEUKEMIA MONUC ] TGLs = 5-6+6.1			
Lung		Inflammation	Acute, Moderate
	Bronchiole	Metaplasia	Squamous, Mild
Note: PROBABLE ASPIRATION PNEUMONIA			
Lymph Node	Mediastinal	Infiltration Cellular	Plasma Cell, Mild
Note: [ INFILTRAT CELL ] TGLs = 6-3			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 7-12			
Pancreas	Acinus	Atrophy	Minimal

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

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ANIMAL ID: 128

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892516

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Acinus

Hyperplasia

Mild

Pars Distalis

Adenoma

Pituitary Gland

Prostate

Note: NO MICRO REASON FOR ENLARGED PROSTATE TGL#3

Sem Ves

Note: TGL 4 NORMAL ON MICRO EXAM.

Spleen

Leukemia Mononuclear

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 129

TRT#: 3

SEX: Male

DAY ON TEST: 340

DOSE: 5.0 MLK/KG

DISP: Natural Death

HISTO: 881466

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Epididymis	Esophagus	Kidney	Liver
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Trachea		

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	Thyroid Gland	Urinary Bladder	

OBSERVATIONS

Brain		Oligodendroglioma Malignant	
Note: [ OLIGODENDR MAL ] TGLs = 2-1			
Heart		Cardiomyopathy	Mild
Lung		Hemorrhage	Mild
[ Hemorrhage TGLS = 1-2+3 ]			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Testes	Interstit Cell	Hyperplasia	Mild
Thymus		Hemorrhage	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 130

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892517

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 4-6			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 3-12			
Pancreas	Acinus	Adenoma	Multiple
Note: [ ADENOMA ] TGLs = 2-9.1			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Note: [ HYPERPLASIA ] TGLs = 5-5+5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 131

TRT#: 3

SEX: Male

DAY ON TEST: 461

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881443

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Intestine Small, Ileum	Intestine Small, Jejunum	Islets, Pancreatic	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		Nephropathy	Minimal
Liver		Basophilic Focus	
		Fatty Change	Diffuse, Minimal
		Hepatodiaphragmatic Nodule	
Note: [ HDN ] TGLs = 2-6			
Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 132

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892518

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	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
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Esophagus

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 4-6+6.1			
Nose		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Moderate
Testes	Bilateral, Interstit Cell	Adenoma	

Note: [ ADENOMA ] TGLs = 2-7

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 133

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892519

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric
Mammary Gland	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Seminal Vesicle	Skeletal Muscle	Stomach, Forestomach
Stomach, Glandular	Thymus	Trachea	Urinary Bladder

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 1-14 ]			
Spleen		Leukemia Mononuclear	
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7			
Thyroid Gland	C Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 133

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892519

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 134

TRT#: 3

SEX: Male

DAY ON TEST: 329

DOSE: 5.0 MLK/KG

DISP: Moribund Sacrifice

HISTO: 881467

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Epididymis	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	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Testes
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Esophagus	Parathyroid Gland
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OBSERVATIONS

Brain		Glioma Malignant	
Heart		Cardiomyopathy	Mild
Liver		Fatty Change	Focal, Minimal
Nose		Foreign Body	Mild
		Fungus	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Hyperplasia	Minimal
Spleen			

Note: NO MICRO REASON FOR SMALL SIZE TGL#1

PRIMARY CAUSE OF DEATH

-

Animal Note: LARGE SIZE NOT CONFIRMED ON MICRO EXAM TGL#2

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 135

TRT#: 3

SEX: Male

DAY ON TEST: 462

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881444

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Islets, Pancreatic	Kidney	Liver	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skin	Spleen	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea

**MISSING**

Intestine Small, Jejunum

**OBSERVATIONS**

Heart		Cardiomyopathy	Mild
Nose	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Mild
Testes	Bilateral, Interstit Cell	Adenoma	
Urinary Bladder		Calculus Gross Observation	
		Calculus Micro Observation Only	

Note: [ CALCUS MIC OBS ] TGLs = 2-9

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 136

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892520

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Prostate	Seminal Vesicle	Skeletal Muscle
Skin	Stomach, Glandular	Trachea	Urinary Bladder

MISSING

Mammary Gland	Thymus
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OBSERVATIONS

Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Minimal
Note: [ PHEOCHROM BGN ] TGLs = 2-8			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus Clear Cell Focus Leukemia Mononuclear Leukemia Mononuclear	
Lymph Node	Mediastinal		
Note: [ LEUKEMIA MONUC ] TGLs = 5-3			
Nose		Foreign Body Fungus	Mild Mild
	Respirat Epith	Hyperplasia Inflammation	Mild Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 1-14			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 136	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 733
	<b>DOSE:</b> 5.0 MLK/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892520

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen Note: [ LEUKEMIA MONUC ] TGLs = 3-3		Leukemia Mononuclear	
Stomach, Forestomach		Hyperkeratosis Hyperplasia	Minimal Basal Cell, Minimal
Testes Note: [ ADENOMA ] TGLs = 3-7	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Minimal
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 137

TRT#: 3

SEX: Male

DAY ON TEST: 610

DOSE: 5.0 MLK/KG

DISP: Moribund Sacrifice

HISTO: 892521

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Note: [ CARDIOMYOPATHY ] TGLs = 6-13			
Intestine Large, Colon		Sarcoma	
Note: [ SARCOMA ] TGLs = 3-5.1+5.2			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Necrosis	Mild
Note: [ NECROSIS ] TGLs = 5-6			
Lung		Fibrosis	Minimal
	Alveolar Epith	Hyperplasia	Minimal
Note: [ HYPERPLASIA ] TGLs = 8-3.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Mild
Spleen		Hematopoietic Cell Proliferation	Moderate
Note: [ HEMA CELL PROL ] TGLs = 4-3			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 137

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 610

**DOSE:** 5.0 MLK/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892521

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 1-7,2-7

Thyroid Gland

C Cell

Hyperplasia

Minimal

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**PRIMARY CAUSE OF DEATH**

-

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Animal Note: THIS IS PROBABLY A NON-EPITHELIAL TUMOR

Animal Note: ORIGINATING IN THE TUNICA PROPRIA AND

Animal Note: SUBMUCOSA. CONSIDER TO ARISE FROM

Animal Note: MEISSNER'S PLEXUS

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 138

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892522

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Bone Marrow	Brain	Epididymis
Esophagus	Heart	Intestine Large, Cecum	Intestine Large, Colon
Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum	Islets, Pancreatic
Mammary Gland	Parathyroid Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Intestine Large, Rectum

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Hyperplasia	Minimal
		Leukemia Mononuclear	
Blood		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ]	TGLs = 8-6+6.1		
Note: [ LEUKEMIA MONUC ]	TGLs = 9-6+6.1		
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 11-2+3		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 10-3		
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 10-3		
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 10-3		
Nose		Foreign Body	Mild

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 138

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892522

ORGAN AND ACCOUNTABLE SITE STATUS

	Respirat Epith	Fungus Hyperplasia Inflammation	Moderate Mild Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy Adenoma	Moderate
Preputial Gland			
Note: [ ADENOMA ] TGLs = 2-10			
Sem Ves			
Note: TGL 5 NORMAL ON MICRO EXAM.			
Skin		Squamous Cell Papilloma	
Note: [ SQ CL PAPILOM ] TGLs = 1-14			
Spleen		Infarct Leukemia Mononuclear	Minimal
Note: [ LEUKEMIA MONUC ] TGLs = 7-3.1+3.2 [ Infarct TGLS = 6-3.2 ]			
Stomach, Forestomach		Hyperkeratosis Hyperplasia Ulcer	Minimal Basal Cell, Mild Mild
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7,4-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 139

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892523

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 4-6+6.1			
Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Marked
Note: [ ADENOMA ] TGLs = 3-9.1			
Note: [ HYPERPLASIA ] TGLs = 3-5			
Prostate		Hyperplasia	Minimal
Sem Ves			
Note: TGL 2 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 140

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892524

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 4-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Hyperplasia	Mild
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 141

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892525

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Medulla	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large, Cecum	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	Pituitary Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Spleen	Stomach, Glandular
Thymus	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Cortex		Hyperplasia	Minimal
Note: 1991 CONVERSION DISCREPANCY. ORIGINAL DIAGNOSIS SITE NOT SPECIFIED.			
Heart		Cardiomyopathy	Mild
Intestine Small, Ileum		Ulcer	Moderate
Note: [ ULCER ] TGLs = 3-5.2			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Atrophy	Mild
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Skin		Squamous Cell Papilloma	
[ Squamous Cell Papilloma TGLS = 1-14 ]			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Note: [ HYPERPLASIA ] TGLs = 5-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 141

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892525

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

-

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Animal Note: POSSIBLE ULCER

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 142

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892526

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	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Cortex		Hyperplasia	Minimal
Note: 1991 CONVERSION DISCREPANCY. ORIGINAL DIAGNOSIS SITE NOT SPECIFIED.			
Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Mild
[ Nephropathy TGLS = 7-4 ]			
Liver		Hepatocellular Adenoma	
		Leukemia Mononuclear	
		Mixed Cell Focus	
Note: [ LEUKEMIA MONUC ] TGLs = 9-6+6.1			
[ Hepatocellular Adenoma TGLS = 8-6 ]			
[ Mixed Cell Focus TGLS = 12-6.1 ]			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
[ Inflammation TGLS = 11-12 ]			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Hyperplasia	Moderate
Note: [ ADENOMA ] TGLs = 6-9.1			
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 142

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892526

**ORGAN AND ACCOUNTABLE SITE STATUS**

Pars Distalis

Angiectasis

Moderate

Note: [ ANGIECTASIS ] TGLs = 10-8

Preputial Gland

Dilatation

Moderate

Note: [ DILATATION ] TGLs = 2-10

Prostate

Note: TGL#5 ENLARGEMENT CAUSED BY NORMAL SECRETION

Skin

Squamous Cell Papilloma

Note: CLUMPS OF PIGMENT

[ Squamous Cell Papilloma TGLS = 1-14 ]

Spleen

Leukemia Mononuclear

Stomach, Forestomach

Hyperplasia

Basal Cell, Minimal

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 3-7,4-7

PRIMARY CAUSE OF DEATH

-

Animal Note: NO MICRO REASON FOR FOCUS TGL13

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 143

TRT#: 3

SEX: Male

DAY ON TEST: 462

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881445

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Kidney	Lymph Node, Mandibular	Lymph Node, Mesenteric
Mammary Gland	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 3-8			
Heart		Cardiomyopathy	Mild
Liver		Basophilic Focus	
Lung		Infiltration Cellular	Histiocyte, Minimal
Nose		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Skin	Subcut Tiss	Fibroma	
Note: [ FIBROMA ] TGLs = 1-13			
Spleen		Hematopoietic Cell Proliferation	Mild
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 144

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892527

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Skeletal Muscle
Skin	Spleen	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 5-6			
Lymph Node	Mediastinal	Angiectasis	Mild
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 1-14 ]			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 4-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 144

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892527

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ HYPERPLASIA ] TGLs = 6-5

Stomach, Glandular

Hyperplasia

Moderate

Note: [ HYPERPLASIA ] TGLs = 6-5

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-17

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 145

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892528

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Note: [ ADENOMA ] TGLs = 4-9.1			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Lung			
Note: NO MICRO REASON FOR PUNCTATE FOCI TGL7			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
Note: [ FUNGUS ] TGLs = 6-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 145

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892528

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen

Note: CONGESTION AND PIGMENT

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7

Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 146

TRT#: 3

SEX: Male

DAY ON TEST: 672

DOSE: 5.0 MLK/KG

DISP: Moribund Sacrifice

HISTO: 892529

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Heart	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lymph Node, Mandibular	Mammary Gland
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Lymph Node, Mesenteric

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Leukemia Mononuclear	
	[ Basophilic Focus TGLS = 9-6.1 ]		
	[ Leukemia Mononuclear TGLS = 5-6+6.1 ]		
Lung		Leukemia Mononuclear	
	[ Leukemia Mononuclear TGLS = 8-2.1+3 ]		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Note: [ LEUKEMIA MONUC ] TGLs = 4-9.1		
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
	Note: [ INFLAMMATION ] TGLs = 7-12		
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 146

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 672

**DOSE:** 5.0 MLK/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892529

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ HYPERPLASIA ] TGLs = 6-8

Spleen

Leukemia Mononuclear

[ Leukemia Mononuclear TGLS = 3-3 ]

Stomach, Forestomach

Hyperkeratosis

Minimal

Testes

Bilateral, Interstit Cell

Hyperplasia

Basal Cell, Minimal

[ Adenoma TGLS = 2-7 ]

Adenoma

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 147

TRT#: 3

SEX: Male

DAY ON TEST: 461

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881446

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Hyperplasia	Minimal
Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 148

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892530

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Thymus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Note: [ FUNGUS ] TGLs = 3-12			
Pancreas	Acinus	Atrophy	Minimal
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 149

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892531

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Trachea	Urinary Bladder	

MISSING

Lymph Node, Mandibular	Thymus
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OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Note: [ NEPHROPATHY ] TGLs = 2-4			
Liver		Basophilic Focus	
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 4-6+6.1			
Lung		Leukemia Mononuclear	
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Moderate
Spleen		Leukemia Mononuclear	
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 150

TRT#: 3

DOSE: 5.0 MLK/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 733

HISTO: 892532

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Skeletal Muscle
Skin	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia Pheochromocytoma Benign	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus Clear Cell Focus Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 7-6+6.1			
Lymph Node	Mediastinal	Hyperplasia	Lymphoid, Mild
Note: [ HYPERPLASIA ] TGLs = 5-3			
Mesentery	Fat	Necrosis	Mild
Note: [ NECROSIS ] TGLs = 3-14			
Nose	Respirat Epith	Foreign Body Hyperplasia Inflammation	Mild Moderate Acute, Mild
Note: [ INFLAMMATION ] TGLs = 6-12			
Pancreas	Acinus Acinus	Atrophy Hyperplasia Leukemia Mononuclear	Mild Mild
Spleen			
Note: [ LEUKEMIA MONUC ] TGLs = 4-3			
Stomach, Forestomach		Hyperkeratosis	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 150	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 733
	<b>DOSE:</b> 5.0 MLK/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892532

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes	Bilateral, Interstit Cell	Hyperplasia Adenoma	Basal Cell, Minimal
Note: [ ADENOMA ] TGLs = 1-7,2-7			

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PRIMARY CAUSE OF DEATH

-

Animal Note: HYPERPLASIA AND PHEOCHROMOCYTOMA

Animal Note: NOT IN SAME GLAND

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 151

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892533

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	Parathyroid Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Hyperplasia	Mild
Blood		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Cardiomyopathy	Moderate
Liver		Leukemia Mononuclear	
		Nephropathy	Mild
		Basophilic Focus	
		Leukemia Mononuclear	
Note: SPONGIOSIS HEPATIS			
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1			
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-3			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-3			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-3			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 151

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892533

**ORGAN AND ACCOUNTABLE SITE STATUS**

Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
		Leukemia Mononuclear	
Preputial GI			
Note: TGL 2 NORMAL ON MICRO EXAM.			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Sem Ves			
Note: TGL 5 NORMAL ON MICRO EXAM.			
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-3.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7,4-7			
Thymus		Leukemia Mononuclear	
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 152

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892534

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	Parathyroid Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Stomach, Forestomach	Thymus	Trachea
Urinary Bladder			

MISSING

Preputial Gland

OBSERVATIONS

Adrenal Cortex		Hyperplasia	Minimal
Note: 1991 CONVERSION DISCREPANCY. ORIGINAL DIAGNOSIS SITE NOT SPECIFIED.			
Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
Heart		Cardiomyopathy	Moderate
Note: [ CARDIOMYOPATHY ] TGLs = 8-13			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Lymph Node	Inguinal	Infiltration Cellular	Plasma Cell, Moderate
Note: [ INFILTRAT CELL ] TGLs = 5-10			
Lymph Node, Mesenteric		Angiectasis	Mild
Note: [ ANGIECTASIS ] TGLs = 10-8			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 7-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal
Sem Ves			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 152

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892534

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

Note: TGL 6 NORMAL ON MICRO EXAM.

Skin

Squamous Cell Carcinoma

Note: [ SQUAM CEL CARC ] TGLs = 2-14+14.1

Spleen

Hematopoietic Cell Proliferation

Moderate

Note: [ HEMA CELL PROL ] TGLs = 9-3

Stomach, Glandular

Hyperplasia

Lymphoid, Mild

Note: [ HYPERPLASIA ] TGLs = 11-5.1

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 3-7,4-7

Thyroid Gland

C Cell

Hyperplasia

Moderate

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 153

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892535

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal 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	Pancreas	Parathyroid Gland	Pituitary Gland
Preputial Gland	Prostate	Seminal Vesicle	Skeletal Muscle
Skin	Stomach, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Epididymis	Testes
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OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 6-6+6.1			
Lymph Node	Mediastinal	Angiectasis	Mild
Mesentery	Fat	Necrosis	Marked
Note: [ NECROSIS ] TGLs = 4-14			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 5-12			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen		Infarct	Mild
Note: [ INFARCT ] TGLs = 1-3.1			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 154

TRT#: 3

SEX: Male

DAY ON TEST: 462

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881447

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Nose		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
[ Hyperplasia TGLS = 3-12 ]			
Pancreas	Acinus	Atrophy	Minimal
Testes	Interstitial Cell	Adenoma	
	Interstitial Cell	Hyperplasia	Minimal
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			
Note: [ ADENOMA ] TGLs = 2-7			
Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 155

TRT#: 3

SEX: Male

DAY ON TEST: 531

DOSE: 5.0 MLK/KG

DISP: Moribund Sacrifice

HISTO: 892536

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large, Cecum	Intestine Large, Colon
Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Spinal Cord	Spleen	Stomach, Glandular	Thymus
Thyroid Gland	Trachea		

MISSING

Parathyroid Gland

OBSERVATIONS

Bone		Osteosarcoma	
Note: OSTEOSARCOMA ON SLIDE #17			
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Hyperplasia	Minimal
Kidney		Cyst	
		Nephropathy	Minimal
[ Cyst TGLS = 8-4.1 ]			
Liver		Basophilic Focus	
		Necrosis	Minimal
		Congestion	Moderate
Lung			
Note: [ CONGESTION ] TGLs = 9-2+3			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 6-14			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 155

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 531

**DOSE:** 5.0 MLK/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892536

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pituitary Gland	Acinus	Hyperplasia	Moderate
Skin	Pars Distalis	Hyperplasia	Minimal
Note: [ EROSION ] TGLs = 2-15		Erosion	Mild
Spleen			
Note: TGL#7 NO MICRO REASON FOR SMALL SIZE.			
Stomach, Forestomach		Hyperkeratosis	Minimal
Testes	Bilateral, Interstit Cell	Hyperplasia	Basal Cell, Minimal
Note: [ ADENOMA ] TGLs = 3-7,4-7		Adenoma	
Urinary Bladder		Calculus Gross Observation	
Note: CALCULUS NOT VISIBLE ON MICRO. TGL 5-9.		Inflammation	Chronic Active, Minimal
Note: [ INFLAMMATION ] TGLs = 10-9			

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 156

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892537

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Thymus
Trachea	Urinary Bladder		

MISSING

Prostate

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 4-6.1			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Minimal
Note: [ HYPERPLASIA ] TGLs = 1-9.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 157

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892538

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Heart	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Spleen
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ BASOPH FOCUS ] TGLs = 6-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 5-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Marked
Note: [ ADENOMA ] TGLs = 4-9.1			
Preputial Gland		Dilatation	Mild
Note: [ DILATATION ] TGLs = 7-10			
Skin		Squamous Cell Papilloma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

**ANIMAL ID:** 157

**TRT#:** 3  
**DOSE:** 5.0 MLK/KG

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

**DAY ON TEST:** 733  
**HISTO:** 892538

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ SQ CL PAPILOM ] TGLs = 1-14  
Stomach, Forestomach

Hyperkeratosis  
Hyperplasia  
Adenoma

Minimal  
Basal Cell, Minimal

Testes  
Note: [ ADENOMA ] TGLs = 2-7,3-7  
Bilateral, Interstit Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 158

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892539

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Spleen	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Fatty Change	Focal, Minimal
Note: [ CLEAR CL FOCUS ] TGLs = 6-6+6.1			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 5-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Mild
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Skin	Subcut Tiss	Granuloma	Mild
Note: [ GRANULOMA ] TGLs = 1-14			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 158

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892539

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Stomach, Glandular

Metaplasia

Squamous, Mild

Note: [ METAPL ] TGLs = 7-5

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7,3-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 159

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892540

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Heart	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Necrosis	Minimal
Lung	Alveolar Epith	Hyperplasia	Mild
Note: [ HYPERPLASIA ] TGLs = 3-2.1			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 160

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892541

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Stomach, Glandular	Trachea	Urinary Bladder

MISSING

Mammary Gland	Parathyroid Gland	Thymus
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OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Eosinophilic Focus	
		Leukemia Mononuclear	
Note: [ EOSIN FOCUS ] TGLs = 7-6.1			
Lung	Alveolar Epith	Hyperplasia	Moderate
		Infiltration Cellular	Histiocyte, Mild
Lymph Node	Mediastinal	Angiectasis	Minimal
Note: [ ANGIECTASIS ] TGLs = 6-3			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
[ Inflammation TGLS = 5-12 ]			
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Marked
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 160	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 733
	<b>DOSE:</b> 5.0 MLK/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892541

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Skin		Keratoacanthoma	
[ Keratoacanthoma TGLS = 1-14 ]			
Spleen		Leukemia Mononuclear	
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			
Thyroid Gland	C Cell	Adenoma	

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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 161

TRT#: 3

SEX: Male

DAY ON TEST: 735

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892542

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Parathyroid Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Mammary Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.2			
[ Basophilic Focus TGLS = 8-6+6.2 ]			
Mesentery	Fat	Necrosis	Mild
Note: [ NECROSIS ] TGLs = 1-14			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Note: [ FUNGUS ] TGLs = 7-12			
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland	Pars Distalis	Cyst	
Note: [ CYST ] TGLs = 6-8			
Salivary Glands	Duct	Metaplasia	Squamous, Mild

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 161

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892542

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Sem Ves

Note: TGL 4 NORMAL ON MICRO EXAM.

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7,3-7

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 162

TRT#: 3

SEX: Male

DAY ON TEST: 462

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881448

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Liver	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	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
Lung			
Note: CONGESTION			
Nose		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Note: BLOOD IN NASAL CAVITY			
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Atrophy	Minimal
Spleen			
Note: CONGESTION			
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-7 ]			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 163

TRT#: 3

SEX: Male

DAY ON TEST: 462

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881449

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	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		Basophilic Focus	
		Fatty Change	Focal, Minimal
Note: [ FATTY CHANGE ] TGLs = 1-6			
Lung			
Note: CONGESTION			
Nose		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Hyperplasia	Mild
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 164

TRT#: 3

SEX: Male

DAY ON TEST: 735

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892543

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Parathyroid Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Spleen	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Mammary Gland

OBSERVATIONS

Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 4-8			
Heart	Atrium	Dilatation	Moderate
Note: [ DILATATION ] TGLs = 6-13			
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 7-6,8-6			
Lung		Infiltration Cellular	Histiocyte, Mild
Note: [ INFILTRAT CELL ] TGLs = 5-2+3			
Note: CLUMPS OF BLACK OR GOLDEN BROWN PIGMENT			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Marked
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Preputial Gland		Abscess	Mild
Sem Ves			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 164

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 735

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892543

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: TGL 3 NORMAL ON MICRO EXAM.

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 165

TRT#: 3

SEX: Male

DAY ON TEST: 734

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892544

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Mammary Gland
Pancreas	Parathyroid Gland	Pituitary Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 6-6,7-6.1			
Lymph Node	Pancreatic	Hyperplasia	Lymphoid, Moderate
Note: [ HYPERPLASIA ] TGLs = 5-9.1			
Lymph Node, Mesenteric		Angiectasis	Minimal
Note: [ ANGIECTASIS ] TGLs = 8-8			
Nose	Respirat Epith	Foreign Body	Minimal
		Hyperplasia	Mild
		Inflammation	Acute, Mild
Preputial Gland		Abscess	Mild
		Adenoma	
Note: [ ABSCESS ] TGLs = 9-10			
Note: [ ADENOMA ] TGLs = 1-14			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Skin		Keratoacanthoma	
Note: [ KERATOACANTHMA ] TGLs = 4-15			
Spleen		Leukemia Mononuclear	
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 165

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 734

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892544

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 166

TRT#: 3

SEX: Male

DAY ON TEST: 461

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881450

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Lung		Infiltration Cellular	Histiocyte, Minimal
Note: CONGESTION			
Nose		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
Spleen			
Note: CONGESTION			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Minimal
Note: [ ADENOMA ] TGLs = 1-7			
Urinary Bladder		Calculus Gross Observation	
		Calculus Micro Observation Only	
Note: [ CALCUS MIC OBS ] TGLs = 3-9			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 167

TRT#: 3

SEX: Male

DAY ON TEST: 735

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892545

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric
Mammary Gland	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Spleen	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Note: [ CLEAR CL FOCUS ] TGLs = 6-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
	Acinus	Mixed Tumor Benign	
Note: [ MIXD TUMOR BGN ] TGLs = 2-9.1+9.2			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Mild
Note: [ HYPERPLASIA ] TGLs = 8-5.1			
Note: [ HYPERPLASIA ] TGLs = 9-5			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 167	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 735
	<b>DOSE:</b> 5.0 MLK/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892545

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes Note: [ ADENOMA ] TGLs = 1-7	Bilateral, Interstit Cell	Adenoma	
Tissue NOS Note: [ HYPERPLASIA ] TGLs = 3-14	Oral	Hyperplasia	Squamous, Mild

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**PRIMARY CAUSE OF DEATH** -

Animal Note: TGL#7 PANCREATIC LN NORMAL ON MICO EXAM.

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Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 168

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892546

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	Parathyroid Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
Blood		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Brain		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 11-1,12-1,13-1			
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Note: [ LEUKEMIA MONUC ] TGLs = 15-4			
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 8-6+6.1			
Note: [ CLEAR CL FOCUS ] TGLs = 16-6.1			
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 14-2+3+3.1			
Lymph Node	Axillary	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-9,6-9.1,18-8			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-9,6-9.1,18-8			
Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 168

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892546

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ LEUKEMIA MONUC ] TGLs = 2-9,6-9.1,18-8  
Mammary Gland Fibroadenoma  
[ Fibroadenoma TGLS = 1-15+15.1 ]  
Mesentery Leukemia Mononuclear  
Fat Necrosis Mild  
Note: [ NECROSIS ] TGLs = 5-14  
Nose Foreign Body Mild  
Fungus Mild  
Respirat Epith Hyperplasia Mild  
Inflammation Acute, Moderate  
Respirat Epith Metaplasia Squamous, Mild  
Pancreas Acinus Atrophy Moderate  
Pituitary Gland Pars Distalis Hyperplasia Mild  
Leukemia Mononuclear  
Note: [ HYPERPLASIA ] TGLs = 10-8  
Preputial GI  
Note: TGL 3 NORMAL ON MICRO EXAM.  
Sem Ves  
Note: TGL 17 NORMAL ON MICRO EXAM.  
Spleen Leukemia Mononuclear  
[ Leukemia Mononuclear TGLS = 7-3 ]  
Stomach, Forestomach Hyperkeratosis Minimal  
Hyperplasia Basal Cell, Mild  
Note: [ HYPERPLASIA ] TGLs = 20-5  
Stomach, Glandular Erosion Mild  
Note: [ EROSION ] TGLs = 19-5.1  
Testes Bilateral, Interstit Cell Adenoma  
Note: [ ADENOMA ] TGLs = 4-7  
Thymus Leukemia Mononuclear  
Note: [ LEUKEMIA MONUC ] TGLs = 9-3.1

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 169

TRT#: 3

SEX: Male

DAY ON TEST: 461

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881451

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Kidney	Liver
Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland
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
Lung			
Note: CONGESTION			
Mesentery	Fat	Necrosis	Mild
Note: [ NECROSIS ] TGLs = 1-13			
Nose	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Spleen			
Note: CONGESTION			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 170

TRT#: 3

SEX: Male

DAY ON TEST: 554

DOSE: 5.0 MLK/KG

DISP: Natural Death

HISTO: 892547

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	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	Parathyroid Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Stomach, Glandular	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Thymus

AUTO PRECLUDES DIAG.

Intestine Large, Cecum

OBSERVATIONS

Adrenal Medulla		Ganglioneuroma	
Note: [ GANGLIONEUROMA ] TGLs = 3-8.1			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 7-6+6.1,8-6+6.1			
Lung		Congestion	Moderate
Note: [ CONGESTION ] TGLs = 4-2+3			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 5-12			
Pancreas	Acinus	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 1-10.1			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 170	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 554
	<b>DOSE:</b> 5.0 MLK/KG	<b>DISP:</b> Natural Death	<b>HISTO:</b> 892547

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen [ Hematopoietic Cell Proliferation TGLS = 6-3 ]		Hematopoietic Cell Proliferation	Moderate
Stomach, Forestomach		Hyperkeratosis	Moderate
		Hyperplasia	Basal Cell, Moderate
		Inflammation	Chronic, Marked
		Ulcer	Marked
Note: [ ULCER ] TGLs = 9-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

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PRIMARY CAUSE OF DEATH

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Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 171

TRT#: 3

SEX: Male

DAY ON TEST: 461

DOSE: 5.0 MLK/KG

DISP: Scheduled Sacrifice

HISTO: 881452

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Intestine Small, Ileum	Intestine Small, Jejunum	Islets, Pancreatic	Kidney
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

Liver		Fatty Change Hepatodiaphragmatic Nodule Mixed Cell Focus	Focal, Mild
[ Hepatodiaphragmatic Nodule TGLS = 1-6 ]			
Lung		Hemorrhage	Minimal
Nose	Respirat Epith	Hyperplasia Inflammation	Mild Acute, Moderate
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 172

TRT#: 3

SEX: Male

DAY ON TEST: 721

DOSE: 5.0 MLK/KG

DISP: Natural Death

HISTO: 892548

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Islets, Pancreatic	Liver
Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric	Pancreas
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Trachea	Urinary Bladder		

MISSING

Mammary Gland	Parathyroid Gland	Thymus
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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	Spleen	Thyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Epididymis			
Note: TGL 2 NORMAL ON MICRO EXAM.			
Heart		Cardiomyopathy	Mild
Kidney		Cyst	
		Nephropathy	Minimal
Note: [ CYST ] TGLs = 5-4.1			
Liver			
Note: NO NODULE SEEN AT MICRO EXAM.TGL 6.			
Lung			
Note: NO DEPRESSION SEEN AT MICRO EXAM.TGL 7.			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Note: [ FUNGUS ] TGLs = 8-12			
Pancreas			
Note: TGL 4 NORMAL ON MICRO EXAM.			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 172

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 721

**DOSE:** 5.0 MLK/KG

**DISP:** Natural Death

**HISTO:** 892548

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Sem Ves

Note: TGL 3 NORMAL ON MICRO EXAM.

Spleen

Note: AUTOLYSIS PRECLUDES DIAGNOSIS.TGLS 9+10.

Stom Gland

Note: NO GLANDULAR FOCUS SEEN AT MICRO.TGL 12.

Stomach, Forestomach

Note: [ SQ CL PAPILOM ] TGLs = 11-5.1

Squamous Cell Papilloma

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 173

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892549

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mesenteric
Mammary Gland	Parathyroid Gland	Pituitary Gland	Preputial Gland
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Glandular	Trachea	Urinary Bladder	

MISSING

Thymus

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Note: [ CARDIOMYOPATHY ] TGLs = 7-13			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Leukemia Mononuclear	
Lymph Node, Mandibular		Ectasia	Moderate
Note: [ ECTASIA ] TGLs = 2-9			
Mesentery	Fat	Necrosis	Minimal
Note: [ NECROSIS ] TGLs = 3-14			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 6-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Prostate		Hyperplasia	Mild
Sem Ves			
Note: TGL 5 NORMAL ON MICRO EXAM.			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 173

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892549

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Spleen

Leukemia Mononuclear

Stomach, Forestomach

Hyperplasia

Basal Cell, Minimal

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 4-7

Thyroid Gland

C Cell

Adenoma

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 174

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892550

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Lymph Node	Pancreatic	Hyperplasia	Lymphoid, Mild
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 4-12.1			
Pancreas	Acinus	Adenoma	
	Acinus	Hyperplasia	Mild
Note: [ HYPERPLASIA ] TGLs = 3-9.1			
Note: [ ADENOMA ] TGLs = 3-9.1			
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
		Squamous Cell Papilloma	
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 174

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892550

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 1-7,2-7

Thyroid Gland

C Cell

Adenoma

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 175

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892551

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Fatty Change	Focal, Minimal
		Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [ HYPERPLASIA ] TGLs = 6-6+6.1,7-6+6.1			
Note: [ LEUKEMIA MONUC ] TGLs = 4-6+6.1			
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 5-12			
Pancreas	Acinus	Atrophy	Mild
Sem Ves			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 175

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892551

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: TGL 2 NORMAL ON MICRO EXAM.

Spleen

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 3-3

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7

Thymus

Leukemia Mononuclear

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 176

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892552

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Liver	Lung	Lymph Node, Mandibular
Mammary Gland	Parathyroid Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Lymph Node, Mesenteric		Ectasia	Mild
Note: [ ECTASIA ] TGLs = 2-8			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 4-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
Note: [ ADENOMA ] TGLs = 3-8			
Testes	Bilateral, Interstit Cell	Adenoma	
[ Adenoma TGLS = 1-7 ]			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 177

TRT#: 3

SEX: Male

DAY ON TEST: 732

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892553

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	Parathyroid Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Lymph Node, Mandibular

OBSERVATIONS

Adrenal Cortex	Leukemia Mononuclear	
Adrenal Medulla	Hyperplasia	Minimal
	Leukemia Mononuclear	
Blood	Leukemia Mononuclear	
Heart	Cardiomyopathy	Mild
	Leukemia Mononuclear	
Kidney	Leukemia Mononuclear	
	Nephropathy	Moderate
Note: [ NEPHROPATHY ] TGLs = 4-4		
Liver	Hepatocellular Carcinoma	
	Leukemia Mononuclear	
Note: [ HEPATOCLR CARC ] TGLs = 5-6+6.1		
Lung	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 6-2+3		
Lymph Node	Axillary	Leukemia Mononuclear
	Mediastinal	Leukemia Mononuclear
	Pancreatic	Leukemia Mononuclear
Note: [ LEUKEMIA MONUC ] TGLs = 3-9.1+9.2		
Lymph Node, Mesenteric	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 3-9.1+9.2		
Nose	Foreign Body	Mild

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 177

TRT#: 3

DOSE: 5.0 MLK/KG

SEX: Male

DISP: Terminal Sacrifice

DAY ON TEST: 732

HISTO: 892553

ORGAN AND ACCOUNTABLE SITE STATUS

	Respirat Epith	Fungus Hyperplasia Inflammation Metaplasia	Moderate Moderate Acute, Moderate Squamous, Mild
Note: [ FUNGUS ] TGLs = 9-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Moderate
Note: [ ADENOMA ] TGLs = 7-8.1			
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-3			
Stomach, Forestomach		Hyperkeratosis Hyperplasia	Minimal Basal Cell, Mild
Note: POSSIBLE ULCER IN FORESTOMACH			
Note: [ HYPERPLASIA ] TGLs = 10-5			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Minimal
Note: FUSIFORM CELLS IN THE ADENOMA			
Note: [ ADENOMA ] TGLs = 1-7			
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			
Thymus		Leukemia Mononuclear	
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 178

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892554

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Preputial Gland	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Spleen	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Adrenal Medulla	Prostate
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OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 6-6+6.1			
Lung		Infiltration Cellular	Histiocyte, Mild
[ Infiltration Cellular TGLS = 5-2+3 ]			
Mesentery	Artery	Inflammation	Chronic Active, Mild
Note: [ INFLAMMATION ] TGLs = 7-8			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 4-12			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Marked
	Artery	Inflammation	Chronic Active, Moderate
Note: [ INFLAMMATION ] TGLs = 3-5+9.1			
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 178

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 733

**DOSE:** 5.0 MLK/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892554

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Sem Ves

Note: TGL 2 NORMAL ON MICRO EXAM.

Stomach, Forestomach

Hyperkeratosis

Minimal

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 179

TRT#: 3

SEX: Male

DAY ON TEST: 655

DOSE: 5.0 MLK/KG

DISP: Moribund Sacrifice

HISTO: 892555

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal 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	Mammary Gland	Pituitary Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Stomach, Forestomach	Stomach, Glandular	Trachea	Urinary Bladder

MISSING

Parathyroid Gland

OBSERVATIONS

Blood		Leukemia Mononuclear	
Bone Marrow		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Fatty Change	Focal, Minimal
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 12-6+6.1,18-6+6.1		
Lung		Leukemia Mononuclear	
Lymph Node	Axillary	Leukemia Mononuclear	
	Lumbar	Leukemia Mononuclear	
	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
	Renal	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 3-9,4-14,7-15,8-8.1,		
Note: [ LEUKEMIA MONUC ]	TGLs = 9-9.2,13-16,14-3		
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 9-9.2,13-16,14-3		
Note: [ LEUKEMIA MONUC ]	TGLs = 3-9,4-14,7-15,8-8.1,		
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 3-9,4-14,7-15,8-8.1,		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 179

TRT#: 3

SEX: Male

DAY ON TEST: 655

DOSE: 5.0 MLK/KG

DISP: Moribund Sacrifice

HISTO: 892555

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ LEUKEMIA MONUC ] TGLs = 9-9,2,13-16,14-3

Nose

Respirat Epith

Foreign Body

Mild

Hyperplasia

Moderate

Inflammation

Acute, Moderate

[ Inflammation TGLS = 16-12 ]

Pancreas

Acinus

Atrophy

Mild

Leukemia Mononuclear

Preputial Gland

Abscess

Mild

[ Abscess TGLS = 2-10 ]

Spleen

Infarct

Moderate

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 10-3.1

Note: [ INFARCT ] TGLs = 11-3.1,17-3.1

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 5-7,6-7

Thymus

Leukemia Mononuclear

Thyroid Gland

C Cell

Adenoma

[ Adenoma TGLS = 15-2 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 180

TRT#: 3

SEX: Male

DAY ON TEST: 733

DOSE: 5.0 MLK/KG

DISP: Terminal Sacrifice

HISTO: 892556

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Mammary Gland

OBSERVATIONS

Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-6			
Lung		Leukemia Mononuclear	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 6-12			
Pancreas	Acinus	Adenoma	Multiple
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-3			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 180

**TRT#:** 3

**DOSE:** 5.0 MLK/KG

**SEX:** Male

**DISP:** Terminal Sacrifice

**DAY ON TEST:** 733

**HISTO:** 892556

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Seminif Tub

Atrophy

Moderate

Interstit Cell

Hyperplasia

Minimal

Note: [ ATROPHY ] TGLs = 2-7

Note: [ ADENOMA ] TGLs = 1-7

Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 181

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892457

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Skeletal Muscle
Spleen	Stomach, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Carcinoma	Metastatic (Pancreas)
Note: [ CARCINOMA ] TGLs = 8-6			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 6-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Moderate
	Acinus	Carcinoma	Multiple
	Acinus	Hyperplasia	Marked
Note: [ ADENOMA ] TGLs = 5-9.1+9.4			
Note: FUSIFORM CELLS IN THE CARCINOMA			
[ Atrophy TGLS = 7-9.2+9.3 ]			
Skin		Hyperkeratosis	Marked
Note: [ HYPERKERATOSIS ] TGLs = 4-14+14.1			
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 181

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892457

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 2-7,3-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 182

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892458

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Kidney		Nephropathy	Minimal
Note: [ NEPHROPATHY ] TGLs = 6-4			
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1			
Mesentery	Fat	Necrosis	Mild
[ Necrosis TGLS = 1-14 ]			
Nose	Respirat Epith	Foreign Body	Moderate
		Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Marked
Note: [ ADENOMA ] TGLs = 5-9.1+9.2			
Pituitary Gland	Pars Distalis	Adenoma	
Note: [ ADENOMA ] TGLs = 7-8			
Prostate			
Note: NO MICRO REASON FOR ENLARGEMENT TGL#4			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 182

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892458

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 2-7,3-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 183

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892459

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Parathyroid Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Mammary Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 2-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Adenoma	
	Acinus	Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 184

TRT#: 4

SEX: Male

DAY ON TEST: 461

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881453

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

Lymph Node, Mesenteric

**OBSERVATIONS**

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Fatty Change	Focal, Minimal
Nose		Fungus	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Interstit Cell	Hyperplasia	Moderate
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 185

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892460

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Mixed Cell Focus	
Note: [ MIXED CL FOCUS ] TGLs = 3-6			
Note: [ BASOPH FOCUS ] TGLs = 4-6+6.1,5-6+6.1			
Lymph Node, Mesenteric		Hyperplasia	Lymphoid, Mild
Note: [ HYPERPLASIA ] TGLs = 6-8			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Mild
Note: [ HYPERPLASIA ] TGLs = 7-5			
Testes	Interstit Cell	Adenoma	
	Seminif Tub	Atrophy	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 185

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892460

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Interstit Cell

Hyperplasia

Minimal

Note: [ ADENOMA ] TGLs = 2-7

Note: [ ATROPHY ] TGLs = 2-7

Thyroid Gland

C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 186

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892461

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lymph Node, Mesenteric	Mammary Gland
Parathyroid Gland	Pituitary Gland	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Spleen	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
[ Nephropathy TGLS = 7-4 ]			
Liver		Basophilic Focus	
		Mixed Cell Focus	
Note: [ MIXED CL FOCUS ] TGLs = 10-6.1			
Lung		Congestion	Moderate
Note: [ CONGESTION ] TGLs = 8-2+3			
Lymph Node, Mandibular	Lymphatic	Ectasia	Mild
Note: [ ECTASIA ] TGLs = 2-9			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 9-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
Note: [ ADENOMA ] TGLs = 6-9.1			
Preputial Gland		Cyst	
Note: [ CYST ] TGLs = 11-10			
Prostate		Hyperplasia	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 186

**TRT#:** 4  
**DOSE:** 10.0 ML/KG

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

**DAY ON TEST:** 729  
**HISTO:** 892461

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Skin [ Fibroma TGLS = 1-14 ]	Subcut Tiss	Fibroma	
Stomach, Forestomach		Hyperkeratosis Hyperplasia	Minimal Basal Cell, Minimal
Testes Note: [ ADENOMA ] TGLs = 4-7,5-7	Bilateral, Interstit Cell	Adenoma	
PRIMARY CAUSE OF DEATH	-		

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 187

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892462

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Lung	Lymph Node, Mandibular	Mammary Gland
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Lymph Node, Mesenteric		Congestion	Mild
Note: [ CONGESTION ] TGLs = 4-8			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 5-9.1+9.2			
Preputial Gland		Abscess	Minimal
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 187

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892462

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ HYPERPLASIA ] TGLs = 7-5.1

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7

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**PRIMARY CAUSE OF DEATH**

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Animal Note: TGL 6 NORMAL MUCOSAL FOLD.

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 188

TRT#: 4

SEX: Male

DAY ON TEST: 726

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892463

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Epididymis	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Islets, Pancreatic	Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea			

MISSING

Esophagus

AUTO PRECLUDES DIAG.

Intestine Large, Cecum	Intestine Small, Ileum	Intestine Small, Jejunum	Kidney
Urinary Bladder			

OBSERVATIONS

Brain		Congestion	Marked
Note: [ CONGESTION ] TGLs = 4-1			
Heart		Cardiomyopathy	Mild
Liver		Basophilic Focus	
Lung		Congestion	Marked
Note: [ CONGESTION ] TGLs = 3-2+3			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
Pancreas	Acinus	Atrophy	Mild
Pituitary Gland		Congestion	Moderate
Note: [ CONGESTION ] TGLs = 5-8			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7.1			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 189

TRT#: 4

SEX: Male

DAY ON TEST: 462

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 871454

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 1-8			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Fatty Change	Diffuse, Mild
		Hepatodiaphragmatic Nodule	
Note: [ HDN ] TGLs = 2-6.1			
Nose		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Marked
Testes	Interstit Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 190

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892464

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland	Pituitary Gland
Preputial Gland	Salivary Glands	Skeletal Muscle	Skin
Spleen	Stomach, Glandular	Thymus	Thyroid Gland
Trachea			

MISSING

Prostate	Seminal Vesicle	Urinary Bladder
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OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
[ Basophilic Focus TGLS = 4-6+6.1 ]			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
[ Inflammation TGLS = 2-12 ]			
Pancreas	Acinus	Hyperplasia	Moderate
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Moderate
		Squamous Cell Papilloma	
Note: [ HYPERPLASIA ] TGLs = 3-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 190

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892464

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 191

TRT#: 4

SEX: Male

DAY ON TEST: 461

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881455

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Mammary Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Fatty Change	Diffuse, Mild
Note: [ FATTY CHANGE ] TGLs = 1-6,2-6.1			
Nose		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Minimal
Spleen		Hematopoietic Cell Proliferation	Mild
Note: CONGESTION AND PIGMENT			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: HYPERPLASIA IN ONE TESTIS			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 192

TRT#: 4

SEX: Male

DAY ON TEST: 461

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881456

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

Mammary Gland

**OBSERVATIONS**

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
		Fatty Change	Diffuse, Minimal
Nose	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Moderate
Pancreas	Acinus	Hyperplasia	Minimal
Pituitary GI			
Note: DEGRANULATED CELLS			
Preputial GI			
Note: DILATED DUCTS			
Spleen		Hematopoietic Cell Proliferation	Mild
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 193

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892465

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Bone Marrow	Brain	Epididymis
Esophagus	Intestine Large, Cecum	Intestine Large, Colon	Intestine Small, Duodenum
Intestine Small, Ileum	Intestine Small, Jejunum	Lung	Lymph Node, Mandibular
Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland	Pituitary Gland
Prostate	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

INSUFFICIENT TISSUE

Preputial Gland

OBSERVATIONS

Adrenal Cortex		Adenoma	
Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Moderate
Intestine Large, Rectum	Submucosa	Edema	Moderate
Note: RECTUM: POSSIBLE EDEMATOUS SUBMUCOSA			
Note: [ EDEMA ] TGLs = 8-5			
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Fatty Change	Focal, Mild
Note: [ FATTY CHANGE ] TGLs = 5-6+6.1			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 1-14 ]			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 4-12			

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 193

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892465

**ORGAN AND ACCOUNTABLE SITE STATUS**

Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
Note: [ ADENOMA ] TGLs = 7-5+9.1+9.2			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Spleen			
Note: CONGESTION AND PIGMENT			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Mild
		Ulcer	Mild
Note: [ ULCER ] TGLs = 9-5.1			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7,3-7,6-7			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 194

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892406

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Necrosis	Minimal
Note: [ CLEAR CL FOCUS ] TGLs = 6-6+6.1			
Nose		Foreign Body	Moderate
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 5-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
Note: ADENOMA ON SLIDE #8			
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Moderate
Note: [ ANGIECTASIS ] TGLs = 4-8			
Preputial GI			
Note: TGL 1 NORMAL ON MICRO EXAM.			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 194

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892406

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Sem Ves

Note: TGL 3 NORMAL ON MICRO EXAM.

Stomach, Forestomach

Hyperkeratosis

Minimal

Hyperplasia

Basal Cell, Minimal

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7

Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 195

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892467

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ]	TGLs = 5-6+6.1		
Note: [ BASOPH FOCUS ]	TGLs = 4-6+6.1		
Lung	Alveolar Epith	Hyperplasia	Minimal
Nose		Foreign Body	Moderate
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ]	TGLs = 1-7,2-7		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 196

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892468

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	Parathyroid Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Stomach, Forestomach
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Hyperplasia	Mild
		Leukemia Mononuclear	
		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
		Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [ HYPERPLASIA ]	TGLs = 8-6.1		
Note: [ LEUKEMIA MONUC ]	TGLs = 9-6+6.1		
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 11-3,12-9		
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 11-3,12-9		
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 11-3,12-9		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 196

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892468

ORGAN AND ACCOUNTABLE SITE STATUS

Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
Note: [ INFLAMMATION ] TGLs = 10-12			
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Sem Ves			
Note: TGL 5 NORMAL ON MICRO EXAM.			
Skin		Squamous Cell Papilloma	
Note: [ SQ CL PAPILOM ] TGLs = 1-14			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-3.1,7-3.1 ]			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 3-7,4-7			
Thymus		Leukemia Mononuclear	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 197

TRT#: 4

SEX: Male

DAY ON TEST: 718

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892469

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Bone Marrow	Brain	Epididymis
Esophagus	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	

MISSING

Parathyroid Gland

AUTO PRECLUDES DIAG.

Adrenal Cortex	Adrenal Medulla	Intestine Large, Cecum	Intestine Large, Colon
Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum
Islets, Pancreatic	Kidney	Lung	Mammary Gland
Pancreas	Preputial Gland	Stomach, Glandular	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 8-6+6.1			
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-8,5-9.1			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-8,5-9.1			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-8,5-9.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
Preputial GI			
Note: TGL#1, TISSUE TOO AUTOLYZED FOR DIAGNOSES.			
Spleen		Leukemia Mononuclear	
[ Leukemia Mononuclear TGLS = 6-3.1 ]			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 197

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 718

**DOSE:** 10.0 ML/KG

**DISP:** Natural Death

**HISTO:** 892469

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Stomach, Forestomach

Testes

Note: [ ADENOMA ] TGLs = 2-7,3-7

Thymus

Note: [ LEUKEMIA MONUC ] TGLs = 7-3

Note: AUTOLYZED

Bilateral, Interstit Cell

Hyperplasia

Adenoma

Leukemia Mononuclear

Basal Cell, Minimal

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**PRIMARY CAUSE OF DEATH**

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Animal Note: MANY TISSUES AUTOLYZED

Animal Note: ALL LYMPH NODES AUTOLYZED

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 198

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892470

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Lymph Node, Mesenteric	Mammary Gland
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thyroid Gland	Trachea	Urinary Bladder

MISSING

Thymus

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Epididymis		Mesothelioma Malignant	Metastatic (Testes)
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 6-12			
Pancreas	Acinus	Atrophy	Moderate
Preputial Gland	Bilateral	Adenoma	
Note: [ ADENOMA ] TGLs = 1-10+10.1			
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Spleen		Developmental Malformation	
Note: [ DEVELOP MALFOR ] TGLs = 7-3.1			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 198

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892470

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**ORGAN AND ACCOUNTABLE SITE STATUS**

Testes

Bilateral, Interstit Cell  
Tunic

Adenoma  
Mesothelioma Malignant

Note: [ ADENOMA ] TGLs = 2-7,3-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 199

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892471

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Note: [ NEPHROPATHY ] TGLs = 7-4			
Liver		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 9-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Moderate
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
Note: [ ADENOMA ] TGLs = 5-9.1			
Prostate			
Note: NO MICRO REASON FOR ENLARGEMENT TGL#3			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Spleen			
Note: NO MICRO REASON FOR NODULE TGL6			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 199

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892471

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7

Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 200

TRT#: 4

SEX: Male

DAY ON TEST: 724

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892472

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Fatty Change	Focal, Minimal
Note: [ FATTY CHANGE ] TGLs = 7-6+6.1			
Lung		Edema	Minimal
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 2-2+3+3.1,6-2+3+3.1			
Note: ASPIRATION PNEUMONIA			
Lym Node Mand			
Note: TGL#9 NO MICRO REASON FOR MANDIBULAR LN ENLARGEMENT			
Lym Node Mesen			
Note: OF MESENTERIC LN.			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Atrophy	Minimal
Stomach, Forestomach		Hyperkeratosis	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 200	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 724
	<b>DOSE:</b> 10.0 ML/KG	<b>DISP:</b> Natural Death	<b>HISTO:</b> 892472

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ULCER ] TGLs = 10-5+5.2		Hyperplasia	Basal Cell, Mild
Note: [ HYPERKERATOSIS ] TGLs = 11-5.2		Ulcer	Minimal
Note: [ HYPERPLASIA ] TGLs = 12-5.2			
Stomach, Glandular		Erosion	Mild
Note: [ EROSION ] TGLs = 13-5.3			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,4-7			
Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

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**PRIMARY CAUSE OF DEATH**

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Animal Note: TGL#5 NO MICRO REASON FOR ENLARGEMENT OF MEDIASTINAL.

Animal Note: TGL#8 NO MICRO REASON FOR ENLARGEMENT

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 201

TRT#: 4

SEX: Male

DAY ON TEST: 613

DOSE: 10.0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892473

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum
Islets, Pancreatic	Lymph Node, Mandibular	Mammary Gland	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Thyroid Gland	Trachea		

MISSING

Intestine Large, Rectum	Thymus
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OBSERVATIONS

Blood		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 1-14		
Heart		Cardiomyopathy	Mild
		Thrombosis	Mild
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
		Necrosis	Mild
Note: [ LEUKEMIA MONUC ]	TGLs = 5-6		
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 6-2+3		
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 3-9.1,7-3		
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ]	TGLs = 3-9.1,7-3		
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 201

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 613

**DOSE:** 10.0 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892473

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ FUNGUS ] TGLs = 8-12

Pancreas

Acinus

Hyperplasia

Mild

Spleen

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 4-3

Stomach, Forestomach

Hyperplasia

Basal Cell, Minimal

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7

Urinary Bladder

Calculus Gross Observation

Calculus Micro Observation Only

Note: [ CALCUS MIC OBS ] TGLs = 9-9

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 202

TRT#: 4

SEX: Male

DAY ON TEST: 302

DOSE: 10.0 ML/KG

DISP: Moribund Sacrifice

HISTO: 881468

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Eye		Inflammation	Chronic Active, Marked
Note: BACTERIAL COLONIES, AND PLANT MATERIAL			
Note: [ INFLAMMATION ] TGLs = 3-13			
Note: PANOPHTHALMITIS WITH FIBROSIS, HEMORRHAGE,			
Harderian Gland		Carcinoma	
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Fatty Change	Focal, Minimal
Note: [ FATTY CHANGE ] TGLs = 2-6			
Nose		Carcinoma	Metastatic (Harderian Gland)
		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Mild
Pancreas	Acinus	Hyperplasia	Minimal
Note: NO ISLETS IN THIS SECTION.			
Note: [ HYPERPLASIA ] TGLs = 4-14			
Salivary Glands		Inflammation	Acute, Minimal
Spleen		Depletion Lymphoid	Mild
Note: CONGESTION AND PIGMENT			
[ Depletion Lymphoid TGLS = 1-3 ]			
Stomach, Forestomach		Hyperkeratosis	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 202

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 302

**DOSE:** 10.0 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 881468

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**ORGAN AND ACCOUNTABLE SITE STATUS**

Hyperplasia

Basal Cell, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 203

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892474

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Stomach, Forestomach	Stomach, Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Adenoma	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1			
Lung	Alveolar Epith	Hyperplasia	Minimal
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 11-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
Note: [ ADENOMA ] TGLs = 6-9.2			
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 10-8			
Prostate			
Note: NO MICRO REASON FOR ENLARGED PROSTATE TGL#4			

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

**ANIMAL ID:** 203

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892474

**ORGAN AND ACCOUNTABLE SITE STATUS**

Sem Ves Note: TGL 5 NORMAL ON MICRO EXAM.			
Skin Note: [ ACANTHOSIS ] TGLs = 1-14.1 Note: [ INFLAMMATION ] TGLs = 1-14.1	Foot Foot	Acanthosis Inflammation	Moderate Chronic Active, Moderate
Spleen Note: [ HEMATOCYST ] TGLs = 7-3.2		Hematocyst	Mild
Testes Note: [ ADENOMA ] TGLs = 2-7,3-7	Bilateral, Interstit Cell	Adenoma	
Thyroid Gland [ Hyperplasia TGLS = 9-2 ]	C Cell	Hyperplasia	Mild
PRIMARY CAUSE OF DEATH	-		

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 204

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892475

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Forestomach	Stomach, Glandular	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Pituitary Gland	Thymus
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OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Epididymis			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Eye	Retina	Atrophy	Mild
	Lens	Cataract	Moderate
[ Atrophy TGLS = 5-14 ]			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
Note: [ BASOPH FOCUS ] TGLs = 7-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 6-12+12.1			
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal
Sem Ves			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 204

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892475

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: TGL 4 NORMAL ON MICRO EXAM.

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7,8-7

Note: FLUID FILLED CYSTS.

Note: TGL#8 INTERSTITIAL CELL ADENOMA CONTAINS

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 205

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892476

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
[ Basophilic Focus TGLS = 4-6 ]			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Minimal
Note: ONE ADENOMA ON SLIDE #8			
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			
Tongue		Hyperkeratosis	Minimal
Note: [ HYPERKERATOSIS ] TGLs = 5-14			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 206

TRT#: 4

SEX: Male

DAY ON TEST: 462

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881457

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Mammary Gland

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Fatty Change	Focal, Minimal
Note: [ FATTY CHANGE ] TGLs = 3-6			
Note: MULTIPLE SMALL GRANULOMAS			
Lung		Alveolar/Bronchiolar Adenoma	
Nose		Inflammation	Acute, Moderate
Pancreas	Acinus	Hyperplasia	Minimal
Preputial Gland		Abscess	Mild
		Inflammation	Chronic Active, Mild
Note: [ ABSCESS ] TGLs = 1-1.			
Note: ABSCESS AND INFLAMMATION ARE IN DIFFERENT GLANDS			
Spleen		Hematopoietic Cell Proliferation	Mild
Note: CONGESTION AND PIGMENT			
Testes	Interstitial Cell	Adenoma	
	Interstitial Cell	Hyperplasia	Moderate
Note: [ ADENOMA ] TGLs = 2-7			
Thyroid Gland	C Cell	Hyperplasia	Mild
Note: MULTIFOCAL			

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 206

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 462

**DOSE:** 10.0 ML/KG

**DISP:** Scheduled Sacrifice

**HISTO:** 881457

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 207

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892477

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Skeletal Muscle
Skin	Spleen	Stomach, Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Fatty Change	Focal, Minimal
Note: [ FATTY CHANGE ] TGLs = 4-6+6.1			
Note: [ BASOPH FOCUS ] TGLs = 6-6.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Note: [ FUNGUS ] TGLs = 5-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 7-9.1+9.2			
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 207

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892477

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			
Thyroid Gland	C Cell	Adenoma	
	C Cell	Hyperplasia	Mild

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 208

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892478

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Prostate

OBSERVATIONS

Kidney		Nephropathy	Minimal
Nose		Foreign Body	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Atrophy	Mild
Sem Ves			
Note: TGL 2 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 209

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892479

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 2-7			
Note: [ HYPERPLASIA ] TGLs = 1-7			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 210

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892480

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Parathyroid Gland	Thymus
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OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Intestine Small, Ileum		Inflammation	Chronic Active, Moderate
Note: [ INFLAMMATION ] TGLs = 4-5.1			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 3-6			
Note: [ BASOPH FOCUS ] TGLs = 5-6			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
[ Inflammation TGLS = 2-12 ]			
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Minimal
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 210

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892480

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 211

TRT#: 4

DOSE: 10.0 ML/KG

SEX: Male

DISP: Natural Death

DAY ON TEST: 722

HISTO: 892481

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	Lymph Node, Mandibular
Mammary Gland	Parathyroid Gland	Pituitary Gland	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Lymph Node, Mesenteric

OBSERVATIONS

Adrenal Cortex		Adenoma	
Adrenal Medulla	Bilateral	Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 7-8,8-8			
Heart		Cardiomyopathy	Minimal
Islets, Pancreatic		Hyperplasia	Moderate
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Fatty Change	Focal, Minimal
Note: [ FATTY CHANGE ] TGLs = 10-6			
Lung	Mediastinum	Abscess	Marked
[ Abscess TGLS = 12-2.1 ]			
Lymph Node	Mediastinal	Angiectasis	Minimal
Note: [ ANGIECTASIS ] TGLs = 11-3			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 6-8.1			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 211

TRT#: 4

SEX: Male

DAY ON TEST: 722

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892481

**ORGAN AND ACCOUNTABLE SITE STATUS**

Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 4-9.1,13-9.1			
Preputial GI			
Note: TGL 1 NORMAL ON MICRO EXAM.			
Spleen	Lymph Follic	Atrophy	Mild
Note: [ ATROPHY ] TGLs = 5-3			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
		Hemorrhage	Marked
Stomach, Glandular			
Note: CLOTTED BLOOD. (GLANDULAR).			
Note: [ HEMORRHAGE ] TGLs = 9-5			
Testes	Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			

PRIMARY CAUSE OF DEATH

-

Animal Note: PLANT MATERIAL AND BLOOD IN SLIDE #5A

Animal Note: TGL#9 STOMACH CONTENTS CONSISTED PRIMARILY OF

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 212

TRT#: 4

SEX: Male

DAY ON TEST: 547

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892482

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Intestine Small, Ileum	Intestine Small, Jejunum	Islets, Pancreatic	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Stomach, Forestomach	Stomach, Glandular	Thymus
Trachea	Urinary Bladder		

OBSERVATIONS

Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Necrosis	Mild
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Minimal
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
Pituitary Gland	Pars Distalis	Cyst	
	Pars Distalis	Hyperplasia	Mild
Note: [ CYST ] TGLs = 3-8			
Skin	Subcut Tiss	Fibroma	
		Squamous Cell Carcinoma	
Note: [ SQUAM CEL CARC ] TGLs = 1-15+15.1			
Note: [ FIBROMA ] TGLs = 2-14+14.1			
Spleen		Hematopoietic Cell Proliferation	Moderate
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 4-7			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 213

TRT#: 4

SEX: Male

DAY ON TEST: 607

DOSE: 10.0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892483

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Ear		Inflammation	Chronic Active, Marked
Note: [ INFLAMMATION ] TGLs = 1-14			
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 2-12+12.1			
Pancreas	Acinus	Atrophy	Mild
Skeletal Muscle		Inflammation	Acute, Moderate
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: HYPERPLASIA AND ADENOMA NOT IN SAME TESTIS			
Thyroid Gland	C Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 214

TRT#: 4

SEX: Male

DAY ON TEST: 617

DOSE: 10.0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892484

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal 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	Mammary Gland	Parathyroid Gland	Pituitary Gland
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Thyroid Gland	Trachea
Urinary Bladder			

OBSERVATIONS

Bone Marrow		Leukemia Mononuclear	
Heart		Leukemia Mononuclear	
Kidney		Leukemia Mononuclear	
		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-6+6.1			
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
	Pancreatic	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-8			
Lymph Node, Mandibular		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-8			
Lymph Node, Mesenteric		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 5-8			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Note: [ FUNGUS ] TGLs = 3-12			
Pancreas	Acinus	Hyperplasia	Mild
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 1-9.1+9.2			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

**ANIMAL ID:** 214

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 617

**DOSE:** 10.0 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892484

**ORGAN AND ACCOUNTABLE SITE STATUS**

Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 2-3.1			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Mild
		Leukemia Mononuclear	
Note: [ HYPERPLASIA ] TGLs = 6-5.1			
Stomach, Glandular		Leukemia Mononuclear	
Testes	Bilateral, Interstit Cell	Adenoma	
Thymus		Leukemia Mononuclear	

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 215

TRT#: 4

SEX: Male

DAY ON TEST: 691

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892485

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone	Brain	Epididymis	Esophagus
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Forestomach
Stomach, Glandular	Thymus	Thyroid Gland	Trachea
Urinary Bladder			

AUTO PRECLUDES DIAG.

Adrenal Cortex	Adrenal Medulla	Bone Marrow	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic		

OBSERVATIONS

Heart		Cardiomyopathy	Moderate
		Leukemia Mononuclear	
Kidney		Nephropathy	Minimal
Liver		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-6			
Lung		Leukemia Mononuclear	
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Adenoma	
Prostate			
Note: NO MICRO REASON FOR LARGE PROSTATE TGL#2			
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Spleen		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 4-3,6-3			
Testes	Bilateral, Interstit Cell	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 215

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 691

**DOSE:** 10.0 ML/KG

**DISP:** Natural Death

**HISTO:** 892485

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 1-7

PRIMARY CAUSE OF DEATH

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Animal Note: NO MICRO REASON FOR LARGE STOMACH TGL#5

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 216

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892486

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Preputial Gland	Seminal Vesicle	Skeletal Muscle
Skin	Spleen	Stomach, Forestomach	Stomach, Glandular
Trachea	Urinary Bladder		

MISSING

Thymus

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 7-6+6.1			
Lymph Node, Mandibular		Ectasia	Minimal
Note: [ ECTASIA ] TGLs = 1-9,6-9			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 4-12+12.1			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 5-9.1			
Pituitary Gland	Pars Distalis	Adenoma	
Prostate		Hyperplasia	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 216

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892486

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**ORGAN AND ACCOUNTABLE SITE STATUS**

Salivary Glands

Duct

Metaplasia

Squamous, Minimal

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7,3-7

Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 217

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892487

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Nose		Foreign Body	Minimal
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
Note: [ INFLAMMATION ] TGLs = 4-12			
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Moderate
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			
Tooth		Angiectasis	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 218

TRT#: 4

SEX: Male

DAY ON TEST: 461

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881458

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric	Nose
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach, Forestomach	Stomach, Glandular
Thymus	Trachea	Urinary Bladder	

MISSING

Mammary Gland	Parathyroid Gland
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OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Islets, Pancreatic		Hyperplasia	Minimal
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
		Fatty Change	Diffuse, Mild
Note: [ CLEAR CL FOCUS ] TGLs = 2-6+6.1			
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Minimal
Pituitary Gland	Pars Distalis	Cyst	
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			
Thyroid Gland	C Cell	Hyperplasia	Mild

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 219

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892488

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Mixed Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1+6.2			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Minimal
Note: [ INFLAMMATION ] TGLs = 7-12			
Pancreas	Acinus	Adenoma	Multiple
Note: [ ADENOMA ] TGLs = 9-9.1			
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
Note: [ ADENOMA ] TGLs = 6-8			
Preputial Gland		Abscess	Mild
Note: [ ABSCESS ] TGLs = 1-10			
Sem Ves			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 219

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892488

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: TGL 2 NORMAL ON MICRO EXAM.

Spleen

Note: NO MICRO REASON FOR SMALL SPLEEN TGL#5

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 3-7,4-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 220

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892489

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 8-6+6.1			
Lung			
Note: NO ADHESIONS SEEN ON MICRO EXAM TGL#1 + TGL#2			
Nose		Foreign Body	Mild
		Fungus	Moderate
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 5-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Minimal
Note: [ ADENOMA ] TGLs = 7-9.1+9.2			
Preputial GI			
Note: TGL 6 NORMAL ON MICRO EXAM.			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 220

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892489

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Stomach, Forestomach

Testes

Note: [ ADENOMA ] TGLs = 3-7,4-7

Bilateral, Interstit Cell

Hyperplasia

Adenoma

Basal Cell, Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 221

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892490

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 3-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Hyperplasia	Marked
Note: [ ADENOMA ] TGLs = 4-9.1+9.2			
Prostate		Hyperplasia	Moderate
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Sem Ves			
Note: TGL 2 NORMAL ON MICRO EXAM.			
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			
Thyroid Gland	C Cell	Adenoma	

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 222

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892491

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
[ Nephropathy TGLS = 4-4 ]			
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Moderate
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7,2-7			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 223

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892492

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Pituitary Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Trachea
Urinary Bladder			

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 7-6+6.1			
Mammary Gland		Fibroadenoma	
Note: [ FIBROADENOMA ] TGLs = 2-14			
Note: NUMEROUS MAST CELLS			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Minimal
Note: [ ADENOMA ] TGLs = 6-9.1			
Preputial Gland		Adenoma	
[ Adenoma TGLS = 1-10 ]			
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Spleen			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:13  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 223

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892492

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: TGL#5 NO MICRO REASON FOR SMALL SPLEEN

Note: CONGESTED

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 3-7

Thyroid Gland

C Cell

Hyperplasia

Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 224

TRT#: 4

SEX: Male

DAY ON TEST: 461

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881459

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Liver		Fatty Change	Diffuse, Minimal
Nose		Inflammation	Acute, Moderate
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Minimal
Stomach, Glandular		Mineralization	Minimal
Testes	Interstit Cell	Hyperplasia	Mild
Thymus	Epithel Cell	Hyperplasia	Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 225

TRT#: 4

SEX: Male

DAY ON TEST: 461

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881460

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Kidney	Liver
Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skin	Spleen	Stomach, Forestomach	Stomach, Glandular
Thymus	Thyroid Gland	Trachea	

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Nose		Inflammation	Acute, Marked
Note: NECROTIC DEBRIS			
Pancreas	Acinus	Hyperplasia	Minimal
Parathyroid Gland		Hyperplasia	Minimal
Preputial Gland		Adenoma	
Note: [ ADENOMA ] TGLs = 1-10			
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	
Urinary Bladder		Calculus Gross Observation	
		Calculus Micro Observation Only	
Note: [ CALCUS MIC OBS ] TGLs = 3-9			

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 226

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892493

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Parathyroid Gland	Pituitary Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Mammary Gland

OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 4-8			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Clear Cell Focus	
Note: [ CLEAR CL FOCUS ] TGLs = 5-6+6.1,7-6+6.1			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
Note: [ INFLAMMATION ] TGLs = 6-12			
Pancreas	Acinus	Hyperplasia	Marked
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Interstit Cell	Adenoma	
	Interstit Cell	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 1-7			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 226

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 729

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892493

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ HYPERPLASIA ] TGLs = 2-7

Thymus

Thymoma Benign

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 227

TRT#: 4

SEX: Male

DAY ON TEST: 462

DOSE: 10.0 ML/KG

DISP: Scheduled Sacrifice

HISTO: 881461

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Islets, Pancreatic	Kidney	Lung
Lymph Node, Mandibular	Lymph Node, Mesenteric	Mammary Gland	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
Liver		Fatty Change	Diffuse, Minimal
Nose		Inflammation	Acute, Moderate
Pancreas	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
Spleen			
Note: CONGESTION AND PIGMENT			
Testes	Bilateral, Interstit Cell	Adenoma	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 228

TRT#: 4

SEX: Male

DAY ON TEST: 582

DOSE: 10.0 ML/KG

DISP: Moribund Sacrifice

HISTO: 892494

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Pancreas	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thyroid Gland	Trachea

MISSING

Parathyroid Gland	Thymus
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OBSERVATIONS

Adrenal Medulla		Pheochromocytoma Benign	
Note: [ PHEOCHROM BGN ] TGLs = 1-8			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus	
		Fatty Change	Focal, Mild
		Hepatodiaphragmatic Nodule	
Note: [ HDN ] TGLs = 2-6.1			
Mammary Gland		Galactocele	
Note: [ GALACTOCELE ] TGLs = 6-10+10.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 4-12			
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Moderate
Note: [ ADENOMA ] TGLs = 3-8.1			
Spleen			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:13

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

**Lab:** TSI MASON

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**ANIMAL ID:** 228

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 582

**DOSE:** 10.0 ML/KG

**DISP:** Moribund Sacrifice

**HISTO:** 892494

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: CONGESTION AND PIGMENT

Testes

Interstitial Cell

Hyperplasia

Mild

Urinary Bladder

Calculus Gross Observation

Calculus Micro Observation Only

[ Calculus Gross Observation TGLS = 5-9 ]

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 229

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892495

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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	Mammary Gland
Pituitary Gland	Preputial Gland	Salivary Glands	Skeletal Muscle
Skin	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Esophagus	Parathyroid Gland
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OBSERVATIONS

Adrenal Cortex		Leukemia Mononuclear	
Adrenal Medulla		Leukemia Mononuclear	
		Pheochromocytoma Benign	
Blood		Leukemia Mononuclear	
Heart		Cardiomyopathy	Mild
Kidney		Leukemia Mononuclear	
		Nephropathy	Mild
Note: [ NEPHROPATHY ] TGLs = 6-4			
Note: A FEW SCLEROSSED GLOMERULI			
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
		Mixed Cell Focus	
Note: [ LEUKEMIA MONUC ] TGLs = 13-6+6.1+6.2			
Note: [ BASOPH FOCUS ] TGLs = 7-6.1			
Lung		Leukemia Mononuclear	
Lymph Node	Mediastinal	Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 11-3			
Lymph Node, Mandibular		Hyperplasia	Lymphoid, Mild
Note: [ HYPERPLASIA ] TGLs = 8-9			
Lymph Node, Mesenteric		Leukemia Mononuclear	

\* PROTOCOL REQUIRED TISSUE



Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 229

TRT#: 4

SEX: Male

DAY ON TEST: 729

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892495

ORGAN AND ACCOUNTABLE SITE STATUS

Note: [ LEUKEMIA MONUC ] TGLs = 11-3  
Nose

Respirat Epith

Foreign Body  
Fungus  
Hyperplasia  
Inflammation

Mild  
Minimal  
Moderate  
Acute, Moderate

Note: [ INFLAMMATION ] TGLs = 10-12  
Pancreas  
Preputial GI

Acinus

Atrophy

Mild

Note: TGL 1 NORMAL ON MICRO EXAM.

Prostate

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 4-7.1

Seminal Vesicle

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 3-7.1

Spleen

Leukemia Mononuclear

Note: [ LEUKEMIA MONUC ] TGLs = 5-3

Stomach, Forestomach

Hyperkeratosis  
Hyperplasia

Mild  
Basal Cell, Mild

Note: [ HYPERPLASIA ] TGLs = 12-5

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7

Thymus

Note: TGL#9 NORMAL ON MICRO EXAM.

PRIMARY CAUSE OF DEATH

-

Animal Note: INFLAMMATION IN THICK SUB MUCOSA. PROBABLE ULCER.

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:13

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 230

TRT#: 4

SEX: Male

DAY ON TEST: 672

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892496

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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
Preputial Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Skin	Thymus	Trachea
Urinary Bladder			

MISSING

Mammary Gland	Parathyroid Gland
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OBSERVATIONS

Adrenal Medulla		Hyperplasia Pheochromocytoma Malignant	Minimal
Note: [ PHEOCHROM MAL ] TGLs = 5-8			
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Mild
Liver		Basophilic Focus Fatty Change	Focal, Minimal
Nose		Foreign Body Fungus	Mild Minimal
	Respirat Epith	Hyperplasia Inflammation	Moderate Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 7-12	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Note: [ ADENOMA ] TGLs = 3-9.1	Artery	Inflammation	Chronic Active, Mild
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Spleen		Pigmentation	Moderate

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:14

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

**Lab:** TSI MASON

**ANIMAL ID:** 230

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 672

**DOSE:** 10.0 ML/KG

**DISP:** Natural Death

**HISTO:** 892496

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ PIGMENT ] TGLs = 4-3  
Stomach, Forestomach

Hyperkeratosis

Minimal

Stomach, Glandular

Hyperplasia

Basal Cell, Minimal

Note: [ CARCINOMA ] TGLs = 8-5.1

Carcinoma

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7

Thyroid Gland

Follicular Cel

Adenoma

[ Adenoma TGLS = 6-2 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 231

TRT#: 4

SEX: Male

DAY ON TEST: 627

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892497

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Intestine Small, Jejunum	Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Spleen	Stomach, Glandular
Thymus	Trachea	Urinary Bladder	

MISSING

Mammary Gland

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Islets, Pancreatic		Hyperplasia	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Lung			
Note: TGLS 6+7 NORMAL ON MICRO EXAM.			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Mild
Pituitary Gland	Pars Distalis	Adenoma	
	Pars Distalis	Angiectasis	Mild
Note: [ ADENOMA ] TGLs = 3-8			
Saliv Glands			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Skin		Basal Cell Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:14

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

**Lab:** TSI MASON

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**ANIMAL ID:** 231

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 627

**DOSE:** 10.0 ML/KG

**DISP:** Natural Death

**HISTO:** 892497

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ BASAL CEL ADEN ] TGLs = 1-10.1

Stomach, Forestomach

Hyperkeratosis

Minimal

Hyperplasia

Basal Cell, Minimal

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 2-7

Thyroid Gland

C Cell

Hyperplasia

Mild

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 232

TRT#: 4

SEX: Male

DAY ON TEST: 633

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892498

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Intestine Large, Cecum
Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum
Islets, Pancreatic	Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric
Mammary Gland	Parathyroid Gland	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Thymus	Thyroid Gland	Trachea	Urinary Bladder

AUTO PRECLUDES DIAG.

Intestine Small, Jejunum

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Necrosis	Mild
Note: [ BASOPH FOCUS ] TGLs = 10-6+6.1			
Note: DISTENDED BLOOD VESSELS IN #6A			
Lymph Node	Mediastinal	Angiectasis	Mild
	Pancreatic	Angiectasis	Mild
Note: [ ANGIECTASIS ] TGLs = 3-3			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Carcinoma	
Note: [ CARCINOMA ] TGLs = 2-9.1+9.2+9.3			
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Spleen		Hematopoietic Cell Proliferation	Moderate
Stomach, Forestomach		Hyperkeratosis	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:14  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

**ANIMAL ID:** 232

**TRT#:** 4

**DOSE:** 10.0 ML/KG

**SEX:** Male

**DISP:** Natural Death

**DAY ON TEST:** 633

**HISTO:** 892498

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ HYPERPLASIA ] TGLs = 6-5+5.1+5.2,8-5+5.1+5.2	Hyperplasia	Basal Cell, Minimal
Note: [ ULCER ] TGLs = 7-5.1+5.2,9-5.1+5.2	Ulcer	Mild
Stomach, Glandular	Erosion	Mild
Note: [ EROSION ] TGLs = 5-5		
Testes	Bilateral, Interstit Cell	Adenoma
Note: [ ADENOMA ] TGLs = 1-7		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 233

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892409

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Mesentery	Fat	Necrosis	Minimal
[ Necrosis TGLS = 1-14 ]			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Atrophy	Mild
Preputial Gland		Abscess	Mild
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Moderate
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 2-7			
Thyroid Gland	C Cell	Hyperplasia	Mild

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:14

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

**Lab:** TSI MASON

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**ANIMAL ID:** 233

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892409

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 234

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892500

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

Heart		Cardiomyopathy	Minimal
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Eosinophilic Focus	
		Fatty Change	Focal, Minimal
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.1			
Mesentery	Fat	Necrosis	Moderate
Note: [ NECROSIS ] TGLs = 2-15			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ FUNGUS ] TGLs = 4-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
	Acinus	Hyperplasia	Mild
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Skin		Keratoacanthoma	
Note: [ KERATOACANTHMA ] TGLs = 1-14			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:14

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

**Lab:** TSI MASON

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**ANIMAL ID:** 234

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892500

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 3-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 235

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892501

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Parathyroid Gland
Pituitary Gland	Preputial Gland	Prostate	Seminal Vesicle
Skeletal Muscle	Skin	Spleen	Stomach, Glandular
Thymus	Trachea	Urinary Bladder	

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Mild
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Lung	Alveolar Epith	Hyperplasia	Mild
Mammary Gland		Fibroadenoma	
Note: [ FIBROADENOMA ] TGLs = 1-14+14.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 5-12			
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Hyperplasia	Marked
Note: ONE ADENOMA ON SLIDE #8			
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal
		Hyperplasia	Basal Cell, Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:14

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

**Lab:** TSI MASON

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<b>ANIMAL ID:</b> 235	<b>TRT#:</b> 4	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 732
	<b>DOSE:</b> 10.0 ML/KG	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 892501

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Testes	Bilateral, Interstit Cell	Adenoma
Note: [ ADENOMA ] TGLs = 2-7,3-7		
Thyroid Gland	Follicle	Cyst

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PRIMARY CAUSE OF DEATH	-
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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 236

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892502

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Preputial Gland
Prostate	Salivary Glands	Seminal Vesicle	Skeletal Muscle
Skin	Stomach, Forestomach	Stomach, Glandular	Thymus
Thyroid Gland	Trachea	Urinary Bladder	

MISSING

Lymph Node, Mandibular	Parathyroid Gland
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OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 3-6+6.1+6.2,8-6+6.1+6.2			
Lung		Leukemia Mononuclear	
Note: [ LEUKEMIA MONUC ] TGLs = 7-2+3			
Lymph Node	Mediastinal	Angiectasis	Mild
Note: [ ANGIECTASIS ] TGLs = 6-3.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Mild
	Respirat Epith	Metaplasia	Squamous, Minimal
Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Minimal
Note: [ ADENOMA ] TGLs = 5-9.1			
Pituitary Gland	Pars Distalis	Adenoma	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:14

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

**Lab:** TSI MASON

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**ANIMAL ID:** 236

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892502

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Pars Distalis

Angiectasis

Mild

Note: [ ADENOMA ] TGLs = 4-8

Spleen

Leukemia Mononuclear

Testes

Bilateral, Interstit Cell

Adenoma

Note: [ ADENOMA ] TGLs = 1-7,2-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 237

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892503

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Adrenal Medulla	Bone	Bone Marrow
Brain	Epididymis	Esophagus	Heart
Intestine Large, Cecum	Intestine Large, Colon	Intestine Large, Rectum	Intestine Small, Duodenum
Intestine Small, Ileum	Intestine Small, Jejunum	Lymph Node, Mesenteric	Mammary Gland
Pituitary Gland	Prostate	Salivary Glands	Seminal Vesicle
Skeletal Muscle	Stomach, Glandular	Thymus	Trachea
Urinary Bladder			

MISSING

Parathyroid Gland

OBSERVATIONS

Islets, Pancreatic		Adenoma	
Note: [ ADENOMA ] TGLs = 5-9.1			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
		Mixed Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 10-6+6.1+6.2			
Lung		Fibrosarcoma	Metastatic (Skin)
Note: [ FIBROSARC ] TGLs = 6-2+3			
Lymph Node, Mandibular		Fibrosarcoma	Metastatic (Skin)
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Note: [ INFLAMMATION ] TGLs = 7-12			
Pancreas	Acinus	Adenoma	
	Acinus	Hyperplasia	Moderate
Preputial Gland		Abscess	Minimal
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Skin	Subcut Tiss	Fibrosarcoma	

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:14  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

**ANIMAL ID:** 237

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892503

**ORGAN AND ACCOUNTABLE SITE STATUS**

Note: [ FIBROSARC ] TGLs = 1-14+14.1

Note: PALISADING PATTERN

Spleen

Hematopoietic Cell Proliferation

Mild

Stomach, Forestomach

Hyperkeratosis

Minimal

Hyperplasia

Basal Cell, Minimal

Note: [ HYPERPLASIA ] TGLs = 9-5

Testes

Interstit Cell

Adenoma

Seminif Tub

Atrophy

Moderate

Interstit Cell

Hyperplasia

Minimal

Note: [ ATROPHY ] TGLs = 2-7

Note: [ ADENOMA ] TGLs = 3-7

Thyroid Gland

C Cell

Adenoma

C Cell

Hyperplasia

Minimal

Note: HYPERPLASIA AND ADENOMA NOT IN SAME LOBE

[ Hyperplasia TGLS = 8-2 ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 238

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892504

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Esophagus	Heart	Intestine Large, Cecum	Intestine Large, Colon
Intestine Large, Rectum	Intestine Small, Duodenum	Intestine Small, Ileum	Intestine Small, Jejunum
Islets, Pancreatic	Lung	Lymph Node, Mandibular	Lymph Node, Mesenteric
Mammary Gland	Pituitary Gland	Preputial Gland	Prostate
Seminal Vesicle	Skeletal Muscle	Skin	Spleen
Stomach, Forestomach	Stomach, Glandular	Thymus	Thyroid Gland
Trachea	Urinary Bladder		

MISSING

Parathyroid Gland

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Epididymis		Mesothelioma Malignant	Metastatic (Testes)
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 5-6+6.2			
Mesentery	Fat	Necrosis	Moderate
[ Necrosis TGLS = 2-14+14.1,3-14+14.1 ]			
Nose		Foreign Body	Mild
		Fungus	Minimal
	Respirat Epith	Hyperplasia	Moderate
		Inflammation	Acute, Moderate
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Minimal
Salivary Glands	Duct	Metaplasia	Squamous, Minimal
Sem Ves			
Note: TGL 4 NORMAL ON MICRO EXAM.			
Testes	Bilateral, Interstit Cell	Adenoma	
	Tunic	Mesothelioma Malignant	

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Safflower oil

**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 11:16:14

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

**Lab:** TSI MASON

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**ANIMAL ID:** 238

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892504

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ ADENOMA ] TGLs = 1-7

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 239

TRT#: 4

SEX: Male

DAY ON TEST: 732

DOSE: 10.0 ML/KG

DISP: Terminal Sacrifice

HISTO: 892506

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal 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	Preputial Gland	Prostate
Salivary Glands	Seminal Vesicle	Skeletal Muscle	Skin
Spleen	Stomach, Glandular	Thyroid Gland	Trachea
Urinary Bladder			

MISSING

Thymus

OBSERVATIONS

Adrenal Medulla		Hyperplasia	Minimal
Heart		Cardiomyopathy	Mild
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Clear Cell Focus	
Note: [ BASOPH FOCUS ] TGLs = 4-6+6.1			
Nose		Foreign Body	Mild
		Fungus	Mild
	Respirat Epith	Hyperplasia	Mild
		Inflammation	Acute, Minimal
	Respirat Epith	Metaplasia	Squamous, Mild
Pancreas	Acinus	Adenoma	Multiple
	Acinus	Atrophy	Mild
	Acinus	Hyperplasia	Moderate
Note: [ ADENOMA ] TGLs = 5-9.2			
Pituitary Gland	Pars Distalis	Hyperplasia	Minimal
Sem Ves			
Note: TGL 3 NORMAL ON MICRO EXAM.			
Stomach, Forestomach		Hyperkeratosis	Minimal

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05144-01  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Safflower oil  
**CAS Number:** 8001-23-8

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 11:16:14  
**First Dose M/F:** NA / NA  
**Lab:** TSI MASON

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**ANIMAL ID:** 239

**TRT#:** 4

**SEX:** Male

**DAY ON TEST:** 732

**DOSE:** 10.0 ML/KG

**DISP:** Terminal Sacrifice

**HISTO:** 892506

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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Note: [ HYPERKERATOSIS ] TGLs = 6-5

Testes

Note: [ ADENOMA ] TGLs = 1-7,2-7

Hyperplasia

Basal Cell, Minimal

Bilateral, Interstit Cell

Adenoma

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 240

TRT#: 4

SEX: Male

DAY ON TEST: 715

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892507

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Adrenal Cortex	Bone	Bone Marrow	Brain
Epididymis	Esophagus	Intestine Large, Cecum	Intestine Large, Colon
Intestine Small, Duodenum	Islets, Pancreatic	Lymph Node, Mesenteric	Mammary Gland
Parathyroid Gland	Preputial Gland	Prostate	Salivary Glands
Seminal Vesicle	Skeletal Muscle	Skin	Stomach, Glandular
Trachea	Urinary Bladder		

MISSING

Thymus

AUTO PRECLUDES DIAG.

Intestine Large, Rectum	Intestine Small, Ileum	Intestine Small, Jejunum	Thyroid Gland
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OBSERVATIONS

Adrenal Medulla		Hyperplasia	Moderate
Heart		Inflammation	Chronic, Marked
Note: [ INFLAMMATION ] TGLs = 4-13+13.1			
Kidney		Nephropathy	Minimal
Liver		Basophilic Focus	
		Mixed Cell Focus	
Lung	Mediastinum	Sarcoma	Metastatic (Heart)
Note: [ SARCOMA ] TGLs = 6-3.1			
Lym Node Mesen			
Note: MESENTERIC STEATITIS ACCOUNTED FOR FOCI TGL3			
Lymph Node, Mandibular		Congestion	Moderate
Note: [ CONGESTION ] TGLs = 8-9			
Mesentery	Fat	Inflammation	Chronic Active, Mild
Note: [ INFLAMMATION ] TGLs = 3-5+5.1			
Nose		Foreign Body	Mild
	Respirat Epith	Hyperplasia	Minimal
		Inflammation	Acute, Moderate
	Respirat Epith	Metaplasia	Squamous, Mild
Note: [ INFLAMMATION ] TGLs = 5-12			

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05144-01

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Safflower oil

CAS Number: 8001-23-8

Date Report Requested: 10/19/2014

Time Report Requested: 11:16:14

First Dose M/F: NA / NA

Lab: TSI MASON

ANIMAL ID: 240

TRT#: 4

SEX: Male

DAY ON TEST: 715

DOSE: 10.0 ML/KG

DISP: Natural Death

HISTO: 892507

**ORGAN AND ACCOUNTABLE SITE STATUS**

Pancreas	Acinus	Adenoma	
	Acinus	Atrophy	Minimal
Note: [ ADENOMA ] TGLs = 7-9.2			
Pituitary Gland	Pars Distalis	Hyperplasia	Mild
Spleen		Pigmentation	Moderate
Note: [ PIGMENT ] TGLs = 2-3			
Stomach, Forestomach		Hyperplasia	Basal Cell, Minimal
		Ulcer	Mild
Testes	Bilateral, Interstit Cell	Adenoma	
Note: [ ADENOMA ] TGLs = 1-7			

PRIMARY CAUSE OF DEATH

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**\*\* END OF REPORT \*\***

\* PROTOCOL REQUIRED TISSUE