

**Experiment Number:** 20007-03  
**Test Type:** 90-DAY  
**Route:** GAVAGE  
**Species/Strain:** Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
**Test Compound:** Kava kava extract  
**CAS Number:** 9000-38-8

**Date Report Requested:** 10/17/2014  
**Time Report Requested:** 21:52:16  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>C Number:</b>	C20007
<b>Lock Date:</b>	05/24/2004
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

Experiment Number: 20007-03

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CAS Number: 9000-38-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BAT

F 344/N Rat Male  
0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic Cell Proliferation										1	1 1.0
Infiltration Cellular, Mononuclear Cl	1	1	1	1	1	1	1		1	1	9 1.0
Vacuolization Cytoplasmic					1						1 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Acinus, Atrophy					1						1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	1		2	1	2	1	1	2	1	1	9 1.3

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X ..Lesion present

I ..Insufficient tissue

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

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Lab: BAT

F 344/N Rat Male  
0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Pars Distalis, Hypertrophy									1		1 1.0
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Cyst						X	X				2

General Body System

NONE

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Inflammation									1		1 1.0
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Testes	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0

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Lab: BAT

F 344/N Rat Male  
0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
<b>Integumentary System</b>											
Mammary Gland	+	+	M	+	M	+	+	+	M	+	7
Skin	+	+	+	+	+	+	+	+	+	+	10
<b>Musculoskeletal System</b>											
Bone	+	+	+	+	+	+	+	+	+	+	10
<b>Nervous System</b>											
Brain	+	+	+	+	+	+	+	+	+	+	10
<b>Respiratory System</b>											
Lung	+	+	+	+	+	+	+	+	+	+	10
Alveolus, Infiltration Cellular, Histiocyte	1									1	2 1.0
Interstitialium, Infiltration Cellular, Mononuclear		1			1			1			3 1.0
CI											
Interstitialium, Inflammation, Chronic	1										1 1.0
Metaplasia, Osseous							1				1 1.0
Metaplasia, Osseous, Focal			1								1 1.0
Nose	+	+	+	+	+	+	+	+	+	+	10
Inflammation, Suppurative			1								1 1.0

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Lab: BAT

F 344/N Rat Male  
0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	1	0
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Squam Epithel, Hyperplasia, Squamous											1	1	1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10		
<b>Special Senses System</b>													
Eye	+	+	+	+	+	+	+	+	+	+	10		
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10		
Infiltration Cellular, Mononuclear Cl	1										1	1.0	
<b>Urinary System</b>													
Kidney	+	+	+	+	+	+	+	+	+	+	10		
Accumulation, Hyaline Droplet						2	2				2	2.0	
Casts Protein								1			1	1.0	
Infiltration Cellular, Mononuclear Cl	1										1	1.0	
Mineralization	1	1	1						1		4	1.0	
Nephropathy	1	1	1	1	1		1		1		7	1.0	
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10		

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Species/Strain: Rat/F 344/N

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CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:16

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
0.125 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic Cell Proliferation							1				1 1.0
Infiltration Cellular, Mononuclear CI	1	1	1		1	1		1	1		7 1.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

Integumentary System

NONE

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Lab: BAT

F 344/N Rat Male  
0.125 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

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Route: GAVAGE

CAS Number: 9000-38-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BAT

F 344/N Rat Male  
0.25 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	2	9	9	9	9	9	9	9	9
	3	3	2	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	2	3
	1	2	3	4	5	6	7	8	9	0	
	<b>*TOTALS</b>										

Alimentary System

Esophagus				+								1
Intestine Large, Cecum				+								1
Intestine Large, Colon				+								1
Intestine Large, Rectum				+								1
Intestine Small, Duodenum				+								1
Intestine Small, Ileum				+								1
Intestine Small, Jejunum				+								1
Liver		+	+	+	+	+	+	+	+	+		10
Infiltration Cellular, Mononuclear Cl						1		1	1		1	5 1.0
Pancreas				+								1
Salivary Glands				+								1
Stomach, Forestomach				+								1
Stomach, Glandular				+								1

Cardiovascular System

Blood Vessel				+								1
Heart				+								1

Endocrine System

Adrenal Cortex				+								1
Adrenal Medulla				+								1
Islets, Pancreatic				+								1

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Species/Strain: Rat/F 344/N

Lab: BAT

F 344/N Rat Male  
0.25 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	2	9	9	9	9	9	9	9	
	3	3	2	3	3	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	2	2	2	2	2	2	2	2	2	3	
	1	2	3	4	5	6	7	8	9	0	*TOTALS

Parathyroid Gland											+	1										
Pituitary Gland											+	1										
Thyroid Gland											+	1										
<b>General Body System</b>																						
NONE																						
<b>Genital System</b>																						
Epididymis											+	1										
Preputial Gland											+	1										
Prostate											+	1										
Seminal Vesicle											+	1										
Testes											+	1										
<b>Hematopoietic System</b>																						
Bone Marrow											+	+	+	+	+	+	+	+	+	+	10	
Lymph Node, Mandibular														M							0	
Lymph Node, Mesenteric														+							1	
Spleen											+	+	+	+	+	+	+	+	+	+	10	
Thymus											+	+	+	+	+	+	+	+	+	+	10	
<b>Integumentary System</b>																						
Mammary Gland																					+	1
Skin																					+	1

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Lab: BAT

F 344/N Rat Male  
0.25 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	2	9	9	9	9	9	9	9
	3	3	2	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	2	2	2	2	2	2	2	2	2	3
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

**Musculoskeletal System**

Bone + 1

**Nervous System**

Brain + 1

**Respiratory System**

Lung + 1

Nose + 1

Trachea + 1

**Special Senses System**

Eye + 1

Harderian Gland + 1

**Urinary System**

Kidney + 1

Urinary Bladder + 1

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Date Report Requested: 10/17/2014

Time Report Requested: 21:52:17

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
0.5 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	3	3	3	3	3	3	3	3	3	4
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10
Bile Duct, Hyperplasia				1							1 1.0
Hepatodiaphragmatic Nodule	X										1
Infiltration Cellular, Mononuclear CI			1	1			1	1	1		5 1.0
Vacuolization Cytoplasmic									1		1 1.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

Integumentary System

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First Dose M/F: NA / NA

Lab: BAT

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0.5 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	3	3	3	3	3	3	3	3	3	4
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

NONE  
Musculoskeletal System

NONE  
Nervous System

NONE  
Respiratory System

NONE  
Special Senses System

NONE  
Urinary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:17

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
1.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	4	4	4	4	4	4	4	4	4	5	
	1	2	3	4	5	6	7	8	9	0	*TOTALS

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatocyte, Hypertrophy				1							1 1.0
Infiltration Cellular, Mononuclear CI	1	1				1	1			1	5 1.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Hematopoietic Cell Proliferation					2						1 2.0
Thymus	+	+	+	+	+	+	+	+	+	+	10

Integumentary System

NONE

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Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:17

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Male  
1.0 G/KG**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	4	4	4	4	4	4	4	4	4	5
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

**Musculoskeletal System**

NONE

**Nervous System**

NONE

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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X ..Lesion present

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1-4 ..Lesion qualified as:

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Experiment Number: 20007-03

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/17/2014

Test Type: 90-DAY

Test Compound: Kava kava extract

Time Report Requested: 21:52:17

Route: GAVAGE

CAS Number: 9000-38-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BAT

F 344/N Rat Male  
2.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	8	9	8	9	9	9	9	0
	3	3	0	3	0	3	3	3	3	5
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	5	5	5	5	5	5	5	5	5	6
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Mixed Cell	1										1 1.0
Infiltration Cellular, Mononuclear Cl		1		1			1	1	1		5 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Inflammation					1						1 1.0
Mineralization			2								1 2.0
Ulcer									2		1 2.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy	1	1	1		1	1	1	1	1		8 1.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

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2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:17

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
2.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	8	9	8	9	9	9	9	0
	3	3	0	3	0	3	3	3	3	5
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	5	5	5	5	5	5	5	5	5	6
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	M	+	+	9
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Cyst			X								1

General Body System

NONE

Genital System

Epididymis	+	+	+	+	+	+	+	+	+	+	10
Preputial Gland	+	+	+	+	+	+	+	+	+	+	10
Inflammation								1			1 1.0
Prostate	+	+	+	+	+	+	+	+	+	+	10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	10
Atrophy										3	1 3.0
Testes	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0

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Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:17

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
2.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	8	9	8	9	9	9	9	0
	3	3	0	3	0	3	3	3	3	5
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	5	5	5	5	5	5	5	5	5	6
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Atrophy				2		1				2	3 1.7
Thymus	+	+	+	+	+	+	+	+	+	+	10
Necrosis										2	1 2.0
<b>Integumentary System</b>											
Mammary Gland	+	+	+	+	+	+	+	+	+	M	9
Skin	+	+	+	+	+	+	+	+	+	+	10
<b>Musculoskeletal System</b>											
Bone	+	+	+	+	+	+	+	+	+	+	10
<b>Nervous System</b>											
Brain	+	+	+	+	+	+	+	+	+	+	10
<b>Respiratory System</b>											
Lung	+	+	+	+	+	+	+	+	+	+	10
Inflammation	1				1		1				3 1.0
Inflammation, Granulomatous				1	1						2 1.0
Interstitial, Infiltration Cellular, Mononuclear	1			1		1			1		4 1.0
CI											
Interstitial, Inflammation, Chronic				1							1 1.0
Metaplasia, Osseous					1						1 1.0

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Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:17

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Male  
2.0 G/KG

	DAY ON TEST												
	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	9	9	8	9	8	9	9	9	9	0			
	3	3	0	3	0	3	3	3	3	5			
ANIMAL ID	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	5	5	5	5	5	5	5	5	5	6			
	1	2	3	4	5	6	7	8	9	0	<b>*TOTALS</b>		
Nose	+	+	+	+	+	+	+	+	+	+	10		
Inflammation									1			1	1.0
Inflammation, Acute							1					1	1.0
Trachea	+	+	+	+	+	+	+	+	+	+	10		
<b>Special Senses System</b>													
Eye	+	+	+	+	+	+	+	+	+	+	10		
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10		
<b>Urinary System</b>													
Kidney	+	+	+	+	+	+	+	+	+	+	10		
Accumulation, Hyaline Droplet							2					1	2.0
Mineralization			1				1		1			3	1.0
Nephropathy			1	1		1	1	1	1			7	1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10		

\*\*\*END OF MALE DATA\*\*\*

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

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Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:17

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	1	9	9	9	9	9
	3	3	3	3	8	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	7
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatodiaphragmatic Nodule	X							X			2
Infiltration Cellular, Mononuclear CI	1	1	1	1		1	1	1	1		8 1.0
Inflammation		1									1 1.0
Mesentery								+			1
Necrosis, Focal							2				1 2.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
Cardiomyopathy		1	1			1			1	1	5 1.0

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X ..Lesion present

I ..Insufficient tissue

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1) Minimal 3) Moderate

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Experiment Number: 20007-03

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/17/2014

Test Type: 90-DAY

Test Compound: Kava kava extract

Time Report Requested: 21:52:17

Route: GAVAGE

CAS Number: 9000-38-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BAT

F 344/N Rat Female  
0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	1	9	9	9	9	9
	3	3	3	3	8	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	6	6	6	6	6	6	6	6	6	7
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Endocrine System

Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Cyst			X		X						2

General Body System

NONE

Genital System

Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Atrophy					2						1 2.0
Thymus	+	+	+	+	+	+	+	+	+	+	10

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X ..Lesion present

I ..Insufficient tissue

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1-4 ..Lesion qualified as:

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2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:17

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0 G/KG

	DAY ON TEST												
	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	9	9	9	9	1	9	9	9	9	9			
	3	3	3	3	8	3	3	3	3	3			
	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	0	0	0	0	0	0	0	0	0	0			
	6	6	6	6	6	6	6	6	6	7			
	1	2	3	4	5	6	7	8	9	0			
											<b>*TOTALS</b>		
Thymus	+	+	+	+	+	+	+	+	+	+	10		
Necrosis					2							1	2.0
<b>Integumentary System</b>													
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10		
Skin	+	+	+	+	+	+	+	+	+	+	10		
<b>Musculoskeletal System</b>													
Bone	+	+	+	+	+	+	+	+	+	+	10		
<b>Nervous System</b>													
Brain	+	+	+	+	+	+	+	+	+	+	10		
<b>Respiratory System</b>													
Lung	+	+	+	+	+	+	+	+	+	+	10		
Alveolus, Infiltration Cellular, Histiocyte			1									1	1.0
Inflammation, Chronic			1									1	1.0
Interstitial, Infiltration Cellular, Mononuclear						1		1	1			3	1.0
Cl Metaplasia, Osseous				1								1	1.0
Nose	+	+	+	+	+	+	+	+	+	+	10		
Trachea	+	+	+	+	+	+	+	+	+	+	10		
<b>Special Senses System</b>													
Eye	+	+	+	+	+	+	+	+	+	+	10		

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Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	1	9	9	9	9	9	
	3	3	3	3	8	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	6	6	6	6	6	6	6	6	6	7	
	1	2	3	4	5	6	7	8	9	0	<b>*TOTALS</b>
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
<b>Urinary System</b>											
Kidney	+	+	+	+	+	+	+	+	+	+	10
Mineralization	1	1	1	1		1	1	1	1		8 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

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Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0.125 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	7	8
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatodiaphragmatic Nodule							X				1
Infiltration Cellular, Mononuclear CI	1	1		1	1		1	1	1	1	8 1.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

Integumentary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0.125 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	7	7	7	7	7	7	7	7	8	
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0.25 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	9	9	9	9	9	9	9	
	3	3	3	3	3	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	8	8	8	8	8	8	8	8	8	9	
	1	2	3	4	5	6	7	8	9	0	*TOTALS

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Mononuclear CI			1				1	1		1	4 1.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

Integumentary System

NONE

Musculoskeletal System

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

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Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0.25 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	8	8	8	8	8	8	8	8	8	9
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

NONE  
Nervous System

NONE  
Respiratory System

NONE  
Special Senses System

NONE  
Urinary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0.5 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	9	9	9	9	9	9	9	9	9	0
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatocyte, Hypertrophy								1	1	1	3 1.0
Hepatodiaphragmatic Nodule			X								1
Infiltration Cellular, Mononuclear Cl	1	1	1	1	1	1		1			7 1.0
Mesentery								+			1
Necrosis, Fatty								2			1 2.0

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
0.5 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	9	9	9	9	9	9	9
	3	3	3	3	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	1
	9	9	9	9	9	9	9	9	9	0
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20007-03

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/17/2014

Test Type: 90-DAY

Test Compound: Kava kava extract

Time Report Requested: 21:52:18

Route: GAVAGE

CAS Number: 9000-38-8

First Dose M/F: NA / NA

Species/Strain: Rat/F 344/N

Lab: BAT

F 344/N Rat Female  
1.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	3	9	9	9	9	9	9
	3	3	3	2	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Alimentary System

Esophagus				+																		1			
Intestine Large, Cecum					+																		1		
Intestine Large, Colon						+																	1		
Intestine Large, Rectum							+																1		
Intestine Small, Duodenum								+															1		
Intestine Small, Ileum									+														1		
Intestine Small, Jejunum										+													1		
Liver			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	10		
Congestion							2																1	2.0	
Hepatocyte, Hypertrophy							2									1	1						3	1.3	
Infiltration Cellular, Mononuclear CI												1	1	1	1	1							8	1.0	
Inflammation																1								1	1.0
Pancreas																								1	
Salivary Glands																								1	
Stomach, Forestomach																								1	
Stomach, Glandular																								1	

Cardiovascular System

Blood Vessel																							1
Heart																							1

Endocrine System

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

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Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
1.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	9	3	9	9	9	9	9	9
	3	3	3	2	3	3	3	3	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	0	0	0	0	0	0	0	0	0	1
	1	2	3	4	5	6	7	8	9	0

\*TOTALS

Adrenal Cortex				+							1
Adrenal Medulla				+							1
Islets, Pancreatic				+							1
Parathyroid Gland				+							1
Pituitary Gland				+							1
Thyroid Gland				+							1
<b>General Body System</b>											
NONE											
<b>Genital System</b>											
Clitoral Gland				+							1
Ovary				+							1
Uterus				+							1
<b>Hematopoietic System</b>											
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10
Lymph Node, Mandibular				M							0
Lymph Node, Mesenteric				+							1
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus	+	+	+	+	+	+	+	+	+	+	10
<b>Integumentary System</b>											
Mammary Gland				+							1
Skin				+							1

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

**F 344/N Rat Female  
1.0 G/KG**

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	9	9	9	3	9	9	9	9	9	9	
	3	3	3	2	3	3	3	3	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	0	0	0	0	0	0	0	0	0	1	
	1	2	3	4	5	6	7	8	9	0	<b>*TOTALS</b>

Skin											+				1													
<b>Musculoskeletal System</b>																												
Bone																+	1											
<b>Nervous System</b>																												
Brain																	+	1										
<b>Respiratory System</b>																												
Lung																		+	1									
Interstitial, Infiltration Cellular, Mononuclear Cl																			1		1	1.0						
Nose																			+				1					
Trachea																			+				1					
<b>Special Senses System</b>																												
Eye																							+		1			
Harderian Gland																								+		1		
<b>Urinary System</b>																												
Kidney																								+		1		
Mineralization																									1		1	1.0
Urinary Bladder																								+		1		

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

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1-4 ..Lesion qualified as:

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Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
2.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	0	9	9	4	0	0	9	9
	3	3	4	3	3	4	2	4	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Alimentary System

Esophagus	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Cecum	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Colon	+	+	+	+	+	+	+	+	+	+	10
Intestine Large, Rectum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Duodenum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Ileum	+	+	+	+	+	+	+	+	+	+	10
Intestine Small, Jejunum	+	+	+	+	+	+	+	+	+	+	10
Liver	+	+	+	+	+	+	+	+	+	+	10
Hepatocyte, Hypertrophy	2	1	2	1	2	2	3	2	1	1	10 1.7
Infiltration Cellular, Mononuclear CI	1			1							2 1.0
Pancreas	+	+	+	+	+	+	+	+	+	+	10
Acinus, Atrophy							1				1 1.0
Salivary Glands	+	+	+	+	+	+	+	+	+	+	10
Stomach, Forestomach	+	+	+	+	+	+	+	+	+	+	10
Inflammation									1		1 1.0
Mineralization								1			1 1.0
Ulcer								2			1 2.0
Stomach, Glandular	+	+	+	+	+	+	+	+	+	+	10

Cardiovascular System

Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked



Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
2.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
	9	9	0	9	9	4	0	0	9	9	
	3	3	4	3	3	4	2	4	3	3	
ANIMAL ID	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	
	1	1	1	1	1	1	1	1	1	1	
	1	1	1	1	1	1	1	1	1	2	
	1	2	3	4	5	6	7	8	9	0	
	<b>*TOTALS</b>										

Cardiomyopathy				1	1						2	1.0
<b>Endocrine System</b>												
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10	
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10	
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10	
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10	
Pituitary Gland	+	+	+	+	+	+	+	+	+	+	10	
Thyroid Gland	+	+		+	+	+	+	+	+	+	9	
Cyst			X									1
<b>General Body System</b>												
NONE												
<b>Genital System</b>												
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10	
Ovary	+	+	+	+	+	+	+	+	+	+	10	
Uterus	+	+	+	+	+	+	+	+	+	+	10	
<b>Hematopoietic System</b>												
Bone Marrow	+	+	+	+	+	+	+	+	+	+	10	
Lymph Node, Mandibular	M	M	M	M	M	M	M	M	M	M	0	
Lymph Node, Mesenteric	+	+	+	+	+	+	+	+	+	+	10	
Spleen	+	+	+	+	+	+	+	+	+	+	10	
Atrophy			2			2	2				3	2.0

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
2.0 G/KG

	DAY ON TEST											
	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0		
	9	9	0	9	9	4	0	0	9	9		
	3	3	4	3	3	4	2	4	3	3		
ANIMAL ID	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0		
	1	1	1	1	1	1	1	1	1	1		
	1	1	1	1	1	1	1	1	1	2		
	1	2	3	4	5	6	7	8	9	0	<b>*TOTALS</b>	
Atrophy			2				2	2			3	2.0
Thymus	+	+	+	+	+	+	+	+	+	+	10	
Necrosis			2				2	2			3	2.0
<b>Integumentary System</b>												
Mammary Gland	+	+	+	+	+	+	+	+	+	+	10	
Skin	+	+	+	+	+	+	+	+	+	+	10	
<b>Musculoskeletal System</b>												
Bone	+	+	+	+	+	+	+	+	+	+	10	
<b>Nervous System</b>												
Brain	+	+	+	+	+	+		+	+	+	9	
Brain, Cerebrum								+			1	
Hemorrhage							2				1	2.0
<b>Respiratory System</b>												
Lung	+	+	+	+	+	+	+	+	+	+	10	
Alveolus, Infiltration Cellular, Histiocyte	1			1		1			1		4	1.0
Congestion, Acute, Diffuse			2								1	2.0
Inflammation									1		1	1.0
Interstitial, Infiltration Cellular, Mononuclear	1				1		1				3	1.0
<b>GI</b>												
Nose	+	+	+	+	+	+	+	+	+	+	10	
Trachea	+	+	+	+	+	+	+	+	+	+	10	

\* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild 4) Marked

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:52:18

First Dose M/F: NA / NA

Lab: BAT

F 344/N Rat Female  
2.0 G/KG

DAY ON TEST	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	9	9	0	9	9	4	0	0	9	9
	3	3	4	3	3	4	2	4	3	3
ANIMAL ID	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
	1	1	1	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	2
	1	2	3	4	5	6	7	8	9	0
	*TOTALS									

Special Senses System

Eye	+	+	+	+	+	+	+	+	+	+	10
Cornea, Neovascularization			2							2	2 2.0
Harderian Gland	+	+	+	+	+	+	+	+	+	+	10
Infiltration Cellular, Mononuclear Cl			2								1 2.0

Urinary System

Kidney	+	+	+	+	+	+	+	+	+	+	10
Mineralization	1	1								1	3 1.0
Urinary Bladder	+	+	+	+	+	+	+	+	+	+	10

\*\* END OF REPORT \*\*

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