Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

NTP Study Number: C20605

Lock Date: Not Entered.

Cage Range: ALL

Date Range: ALL

**Reasons For Removal:** ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

**TDMSE Version:** 3.0.2.3\_002

**PWG Approval Date:** NONE

Test Type: SPECIAL STUD'
Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 0 2 8										
0 mg/kg ANIMAL ID	0 0 1 2 1	0 0 1 2 2	0 0 1 2 3	0 0 1 2 4	0 0 1 2 5	0 0 1 2 6	0 0 1 2 7	0 0 1 2 8	0 0 1 2 9	0 0 1 3 0	* TOTAL
ALIMENTARY SYSTEM											
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
CARDIOVASCULAR SYSTEM											
Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
ENDOCRINE SYSTEM											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	+	+	+	+	10
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

# GENITAL SYSTEM

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

		1				_	ı				
DAY ON TEST	0	0	0	0	0	0	0 0 2 8	0	0	0	)
HARLAN SPRAGUE DAWLEY RATS MALE	8	8	8	8	8	8	8	8	2 8	8	
0 mg/kg ANIMAL ID	0 0 1 2 1	0 0 1 2 2	0 0 1 2 3	0 0 1 2 4	0 0 1 2 5	0 0 1 2 6	0 0 1 2 7	0 0 1 2 8	0 0 1 2 9	0 0 1 3 0	
Epididymis	+	+	+	+	+	+	+	+	+	+	
Prostate	+	+	+	+	+	+	+	+	+	+	. 10
Seminal Vesicle	+	+	+	+	+	+	+	+	+	+	- 10
Testes	+	+	+	+	+	+	+	+	+	+	10
HEMATOPOIETIC SYSTEM											
Spleen	+	+	+	+	+	+	+	+	+	+	- 10
INTEGUMENTARY SYSTEM											
NONE				-	-	-	-				
MUSCULOSKELETAL SYSTEM											
NONE											
NERVOUS SYSTEM											
NONE							_				
RESPIRATORY SYSTEM											

# NONE SPECIAL SENSES SYSTEM

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

HARLAN SPRAGUE DAW	DAY ON TEST	0 0 2 8										
0 mg/kg	ANIMAL ID	0 0 1 2 1	0 0 1 2 2	0 0 1 2 3	0 0 1 2 4	0 0 1 2 5	0 0 1 2 6	0 0 1 2 7	0 0 1 2 8	0 0 1 2 9	0 0 1 3 0	* TOTALS
URINARY SYSTEM				-	-	-	-	-			-	
Kidney		+	+	+	+	+	+	+	+	+	+	10
·	•											
SYSTEMIC LESIONS												

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 0 2 8										
62.5 mg/kg  ANIMAL ID	0 0 1 3 1	0 0 1 3 2	0 0 1 3 3	0 0 1 3 4	0 0 1 3 5	0 0 1 3 6	0 0 1 3 7	0 0 1 3 8	0 0 1 3 9	0 0 1 4 0	
ALIMENTARY SYSTEM	•	1	•	•	•	•	•		•	•	
Stomach, Forestomach			+						+		2
CARDIOVASCULAR SYSTEM	•										
NONE											
ENDOCRINE SYSTEM											
NONE					-	-		,		,	
GENERAL BODY SYSTEM											
NONE											
GENITAL SYSTEM											
NONE											
HEMATOPOIETIC SYSTEM											
NONE											
INTEGUMENTARY SYSTEM											
NONE											
MUSCULOSKELETAL SYSTEM											

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present

NONE

I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 0 2 8	0 0 2 8	0 0 2 8								
62.5 mg/kg ANIMAL ID	0 0 1 3 1	0 0 1 3 2	0 0 1 3 3	0 0 1 3 4	0 0 1 3 5	0 0 1 3 6	0 0 1 3 7	0 0 1 3 8	0 0 1 3 9	0 0 1 4 0	* TOTALS
NERVOUS SYSTEM NONE											

## RESPIRATORY SYSTEM

NONE

#### **SPECIAL SENSES SYSTEM**

NONE

#### **URINARY SYSTEM**

NONE

#### **SYSTEMIC LESIONS**

Multiple Organ

2

M .. Missing tissue

A .. Autolysis precludes evaluation

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Species/Strain: RATS/HSD

Route: GAVAGE

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract **CAS Number:** GUMGUGGULEXT Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

1

Lab: BAT

125 mg/kg  ANIMAL ID  O O O O O O O O O O O O O O O O O O O	* <b>T</b> C

### CARDIOVASCULAR SYSTEM

Heart

#### **ENDOCRINE SYSTEM**

NONE

### **GENERAL BODY SYSTEM**

NONE

#### **GENITAL SYSTEM**

NONE

#### **HEMATOPOIETIC SYSTEM**

NONE

#### **INTEGUMENTARY SYSTEM**

NONE

#### **MUSCULOSKELETAL SYSTEM**

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

1

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 0 2 8										
125 mg/kg ANIMAL ID	0 0 1 4 1	0 0 1 4 2	0 0 1 4 3	0 0 1 4 4	0 0 1 4 5	0 0 1 4 6	0 0 1 4 7	0 0 1 4 8	0 0 1 4 9	0 0 1 5 0	* TOTALS

#### **NERVOUS SYSTEM**

NONE

#### **RESPIRATORY SYSTEM**

NONE

#### **SPECIAL SENSES SYSTEM**

NONE

#### **URINARY SYSTEM**

NONE

#### SYSTEMIC LESIONS

Multiple Organ

M .. Missing tissue

A .. Autolysis precludes evaluation

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	
250 mg/kg  ANIMAL ID	0 0 1 5	0 0 1 5 2	0 0 1 5 3	0 0 1 5 4	0 0 1 5 5	0 0 1 5 6	0 0 1 5 7	0 0 1 5 8	0 0 1 5 9	0 0 1 6 0	* TOTALS

#### **ALIMENTARY SYSTEM**

NONE

#### CARDIOVASCULAR SYSTEM

NONE

#### **ENDOCRINE SYSTEM**

NONE

#### **GENERAL BODY SYSTEM**

NONE

#### **GENITAL SYSTEM**

NONE

#### **HEMATOPOIETIC SYSTEM**

Thymus + + 2

#### **INTEGUMENTARY SYSTEM**

NONE

#### **MUSCULOSKELETAL SYSTEM**

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract **CAS Number: GUMGUGGULEXT**  Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

2

Lab: BAT

NONE				-								
NERVOUS SYSTEM												
250 mg/kg	ANIMAL ID	0 0 1 5 1	0 0 1 5 2	0 0 1 5 3	0 0 1 5 4	0 0 1 5 5	0 0 1 5 6	0 0 1 5 7	0 0 1 5 8	0 0 1 5 9	0 0 1 6 0	* TOTALS
HARLAN SPRAGUE DA	DAY ON TEST AWLEY RATS	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	_

### RESPIRATORY SYSTEM

NONE

#### **SPECIAL SENSES SYSTEM**

NONE

#### **URINARY SYSTEM**

NONE

#### SYSTEMIC LESIONS

Multiple Organ

M .. Missing tissue

A .. Autolysis precludes evaluation

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

X .. Lesion present

I .. Insufficient tissue

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE		
500 mg/kg		
ANIMAL ID		
		* TOTAL O
		* TOTALS
ALIMENTARY SYSTEM		
NONE		
CARDIOVASCULAR SYSTEM		
NONE		
ENDOCRINE SYSTEM		
NONE		
GENERAL BODY SYSTEM		
NONE		
GENITAL SYSTEM		
NONE		
HEMATOPOIETIC SYSTEM		
NONE		
INTEGUMENTARY SYSTEM		
NONE		
MUSCULOSKELETAL SYSTEM		
NONE		
* Total animals with tissue examined microscopically; Total + Tissue examined microscopically	I animals with tumor M Missing tissue A Autolysis precludes eval	luation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST	
HARLAN SPRAGUE DAWLEY RATS MALE	
500 mg/kg	
ANIMAL ID	
	 * TOTALS
NERVOUS SYSTEM	
NONE	
RESPIRATORY SYSTEM	
NONE	
SPECIAL SENSES SYSTEM	
NONE	
URINARY SYSTEM	
NONE	
SYSTEMIC LESIONS	
Multiple Organ	0

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract **CAS Number:** GUMGUGGULEXT Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 0 2 8										
1000 mg/kg ANIMAL ID	0 0 1 7 1	0 0 1 7 2	0 0 1 7 3	0 0 1 7 4	0 0 1 7 5	0 0 1 7 6	0 0 1 7 7	0 0 1 7 8	0 0 1 7 9	0 0 1 8 0	* TOTA
ALIMENTARY SYSTEM											
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
CARDIOVASCULAR SYSTEM											
Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
ENDOCRINE SYSTEM											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	+	+	+	+	М	+	+	+	9
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

NONE

#### **GENITAL SYSTEM**

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON HARLAN SPRAGUE DAWLEY I MALE	I IESI	0 0 0 0 2 2 8 8	)   (	0   0	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	
000 mg/kg	MAL ID	0 0 0 0 1 1 7 7 1 2	) (	0   0   1   7	0 0 1 7 5	0 0 1 7 6	0 0 1 7 7	0 0 1 7 8	0 0 1 7 9	0 0 1 8 0	* -
Epididymis	-	+ +		- +	+	+	+	+	+	+	
Prostate		+ +		- +	+	+	+	+	+	+	
Seminal Vesicle		+ +		- +	+	+	+	+	+	+	
Testes		+ +		- +	+	+	+	+	+	+	
HEMATOPOIETIC SYSTEM											
Spleen		+ +		+	+	+	+	+	+	+	
INTEGUMENTARY SYSTEM											
NONE											
MUSCULOSKELETAL SYSTEN											
NONE											
NERVOUS SYSTEM							_				
NONE											

### SPECIAL SENSES SYSTEM

NONE

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS MALE	0 0 2 8										
1000 mg/kg  ANIMAL ID	0 0 1 7 1	0 0 1 7 2	0 0 1 7 3	0 0 1 7 4	0 0 1 7 5	0 0 1 7 6	0 0 1 7 7	0 0 1 7 8	0 0 1 7 9	0 0 1 8 0	* TOTALS
URINARY SYSTEM				-	-	-	-				
Kidney	+	+	+	+	+	+	+	+	+	+	10
SYSTEMIC LESIONS											
Multiple Organ	+	+	+	+	+	+	+	+	+	+	10

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

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	2	0 0 2 8	0 0 2 8								
O mg/kg Animal id	0 0 1 8 1	0 0 1 8 2	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 0	* TOTAL
ALIMENTARY SYSTEM											
Liver	+	+	+	+	+	+	+	+	+	+	10
Pancreas	+	+	+	+	+	+	+	+	+	+	10
CARDIOVASCULAR SYSTEM											
Blood Vessel	+	+	+	+	+	+	+	+	+	+	10
Heart	+	+	+	+	+	+	+	+	+	+	10
ENDOCRINE SYSTEM											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	10
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	10
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	10
Parathyroid Gland	+	+	М	+	+	+	+	+	+	+	9
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	10

NONE

#### **GENITAL SYSTEM**

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

								_			
DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
0 mg/kg  ANIMAL ID	0 0 1 8 1	0 0 1 8 2	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 0	
Clitoral Gland	+	+	+	+	+	+	+	+		+	
Ovary	+	+	+	+	+	+	+	+	+	+	·
Uterus	+	+	+	+	+	+	+	+	+	+	
HEMATOPOIETIC SYSTEM										,	
Spleen	+	+	+	+	+	+	+	+	+	+	
INTEGUMENTARY SYSTEM											
NONE											
MUSCULOSKELETAL SYSTEM											
NONE											
NERVOUS SYSTEM											
NONE								,			
RESPIRATORY SYSTEM											
NONE											
SPECIAL SENSES SYSTEM											

### **URINARY SYSTEM**

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

HARLAN SPRAGUE D	DAY ON TEST	0 0 2 8											
0 mg/kg	ANIMAL ID	0 0 1 8 1	0 0 1 8 2	0 0 1 8 3	0 0 1 8 4	0 0 1 8 5	0 0 1 8 6	0 0 1 8 7	0 0 1 8 8	0 0 1 8 9	0 0 1 9 0		* TOTALS
Kidney		+	+	+	+	+	+	+	+	+	+		10
SYSTEMIC LESIONS													
Multiple Organ		+	+	+	+	+	+	+	+	+	+		10

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation

Species/Strain: RATS/HSD

Route: GAVAGE

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract **CAS Number:** GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

		1		1	1		1				
DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0	0 0 2 8	0 0 2 8	0 0 2 8							
2.5 mg/kg ANIMAL ID	0 0 1 9	0 0 1 9 2	0 0 1 9 3	0 0 1 9 4	0 0 1 9 5	0 0 1 9 6	0 0 1 9 7	0 0 1 9 8	0 0 1 9	0 0 2 0 0	 * TO
ALIMENTARY SYSTEM		1			<u> </u>						
Liver										+	•
CARDIOVASCULAR SYSTEM											
NONE											
ENDOCRINE SYSTEM											
NONE			_								
GENERAL BODY SYSTEM											
NONE											
GENITAL SYSTEM											
NONE		-									
HEMATOPOIETIC SYSTEM											
Thymus	+	+			_						2
INTEGUMENTARY SYSTEM											
NONE											
MUSCULOSKELETAL SYSTEM				-							
Skeletal Muscle										+	1

<sup>...</sup> I otal animals with tissue examined microscopically; I otal animals with tumor

A .. Autolysis precludes evaluation

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

3

Lab: BAT

NONE RESPIRATORY SYSTEM	<u> </u>											
NERVOUS SYSTEM												
62.5 mg/kg	ANIMAL ID	0 0 1 9	0 0 1 9 2	0 0 1 9 3	0 0 1 9 4	0 0 1 9 5	0 0 1 9 6	0 0 1 9 7	0 0 1 9 8	0 0 1 9 9	0 0 2 0 0	* TOTALS
HARLAN SPRAGUE DAN FEMALE	DAY ON TEST	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	0 0 2 8	

#### .....

NONE

#### **SPECIAL SENSES SYSTEM**

NONE

#### **URINARY SYSTEM**

NONE

#### **SYSTEMIC LESIONS**

Multiple Organ

+

M .. Missing tissue

A .. Autolysis precludes evaluation

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Species/Strain: RATS/HSD

Route: GAVAGE

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract **CAS Number: GUMGUGGULEXT**  Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
125 mg/kg ANIMAL ID	0 0 2 0 1	0 0 2 0 2	0 0 2 0 3	0 0 2 0 4	0 0 2 0 5	0 0 2 0 6	0 0 2 0 7	0 0 2 0 8	0 0 2 0 9	0 0 2 1 0	* TOTALS

#### **ALIMENTARY SYSTEM**

NONE

#### CARDIOVASCULAR SYSTEM

NONE

#### **ENDOCRINE SYSTEM**

NONE

#### **GENERAL BODY SYSTEM**

NONE

#### **GENITAL SYSTEM**

NONE

#### **HEMATOPOIETIC SYSTEM**

**Thymus** 1

#### **INTEGUMENTARY SYSTEM**

NONE

#### **MUSCULOSKELETAL SYSTEM**

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
125 mg/kg ANIMAL ID	0 0 2 0 1	0 0 2 0 2	0 0 2 0 3	0 0 2 0 4	0 0 2 0 5	0 0 2 0 6	0 0 2 0 7	0 0 2 0 8	0 0 2 0 9	0 0 2 1 0	* TOTALS

#### **NERVOUS SYSTEM**

NONE

#### **RESPIRATORY SYSTEM**

NONE

#### **SPECIAL SENSES SYSTEM**

NONE

#### **URINARY SYSTEM**

NONE

#### **SYSTEMIC LESIONS**

Multiple Organ

1

M .. Missing tissue

A .. Autolysis precludes evaluation

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Species/Strain: RATS/HSD

Route: GAVAGE

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract **CAS Number: GUMGUGGULEXT**  Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
250 mg/kg  ANIMAL ID	0 0 2 1 1	0 0 2 1 2	0 0 2 1 3	0 0 2 1 4	0 0 2 1 5	0 0 2 1 6	0 0 2 1 7	0 0 2 1 8	0 0 2 1 9	0 0 2 2 0	* TOTALS

#### **ALIMENTARY SYSTEM**

NONE

#### CARDIOVASCULAR SYSTEM

NONE

#### **ENDOCRINE SYSTEM**

NONE

#### **GENERAL BODY SYSTEM**

NONE

#### **GENITAL SYSTEM**

NONE

#### **HEMATOPOIETIC SYSTEM**

**Thymus** 3

#### **INTEGUMENTARY SYSTEM**

NONE

#### **MUSCULOSKELETAL SYSTEM**

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

3

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
250 mg/kg  ANIMAL ID	0 0 2 1 1	0 0 2 1 2	0 0 2 1 3	0 0 2 1 4	0 0 2 1 5	0 0 2 1 6	0 0 2 1 7	0 0 2 1 8	0 0 2 1 9	0 0 2 2 0	* TOTALS
NERVOUS SYSTEM NONE											

#### **RESPIRATORY SYSTEM**

NONE

#### **SPECIAL SENSES SYSTEM**

NONE

#### **URINARY SYSTEM**

NONE

#### **SYSTEMIC LESIONS**

Multiple Organ

+ +

M .. Missing tissue

A .. Autolysis precludes evaluation

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Species/Strain: RATS/HSD

Route: GAVAGE

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract **CAS Number: GUMGUGGULEXT**  Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
500 mg/kg  ANIMAL ID	0 0 2 2 1	0 0 2 2 2	0 0 2 2 3	0 0 2 2 4	0 0 2 2 5	0 0 2 2 6	0 0 2 2 7	0 0 2 2 8	0 0 2 2 9	0 0 2 3 0	* TOTALS

#### **ALIMENTARY SYSTEM**

NONE

#### CARDIOVASCULAR SYSTEM

NONE

#### **ENDOCRINE SYSTEM**

NONE

#### **GENERAL BODY SYSTEM**

NONE

#### **GENITAL SYSTEM**

NONE

#### **HEMATOPOIETIC SYSTEM**

**Thymus** 2

#### **INTEGUMENTARY SYSTEM**

NONE

#### **MUSCULOSKELETAL SYSTEM**

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
500 mg/kg  ANIMAL ID	0 0 2 2 1	0 0 2 2 2	0 0 2 2 3	0 0 2 2 4	0 0 2 2 5	0 0 2 2 6	0 0 2 2 7	0 0 2 2 8	0 0 2 2 9	0 0 2 3 0	* TOTALS
NERVOUS SYSTEM NONE											

## RESPIRATORY SYSTEM

NONE

#### **SPECIAL SENSES SYSTEM**

NONE

#### **URINARY SYSTEM**

NONE

#### **SYSTEMIC LESIONS**

Multiple Organ

2

M .. Missing tissue

A .. Autolysis precludes evaluation

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8	0 0 2 8	0 0 2 8								
1000 mg/kg ANIMAL ID	0 0 2 3 1	0 0 2 3 2	0 0 2 3 3	0 0 2 3 4	0 0 2 3 5	0 0 2 3 6	0 0 2 3 7	0 0 2 3 8	0 0 2 3 9	0 0 2 4 0	* TC
ALIMENTARY SYSTEM											
Liver	+	+	+	+	+	+	+	+	+	+	
Pancreas	+	+	+	+	+	+	+	+	+	+	
CARDIOVASCULAR SYSTEM											
Blood Vessel	+	+	+	+	+	+	+	+	+	+	
Heart	+	+	+	+	+	+	+	+	+	+	
ENDOCRINE SYSTEM											
Adrenal Cortex	+	+	+	+	+	+	+	+	+	+	•
Adrenal Medulla	+	+	+	+	+	+	+	+	+	+	•
Islets, Pancreatic	+	+	+	+	+	+	+	+	+	+	•
Parathyroid Gland	+	+	+	+	+	М	+	+	+	М	
Thyroid Gland	+	+	+	+	+	+	+	+	+	+	•

### **GENITAL SYSTEM**

NONE

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
1000 mg/kg ANIMAL ID	0 0 2 3 1	0 0 2 3 2	0 0 2 3 3	0 0 2 3 4	0 0 2 3 5	0 0 2 3 6	0 0 2 3 7	0 0 2 3 8	0 0 2 3 9	0 0 2 4 0	
Clitoral Gland	+	+	+	+	+	+	+	+	+	+	10
Ovary	+	+	+	+	+	+	+	+	+	+	10
Uterus	+	+	+	+	+	+	+	+	+	+	10
HEMATOPOIETIC SYSTEM							,	,			
Spleen	+	+	+	+	+	+	+	+	+	+	10
Thymus				+							1
INTEGUMENTARY SYSTEM											
NONE		_		_		-					
MUSCULOSKELETAL SYSTEM											
NONE			,				_				
NERVOUS SYSTEM											
NONE	,										
RESPIRATORY SYSTEM											
NONE		_		_		-					
SDECIAL SENSES SYSTEM											

SPECIAL SENSES SYSTEM

NONE

- \* .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Route: GAVAGE

Species/Strain: RATS/HSD

#### P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Gum Guggul Extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 05/13/2019 Time Report Requested: 15:00:28 First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

DAY ON TEST HARLAN SPRAGUE DAWLEY RATS FEMALE	0 0 2 8										
1000 mg/kg  ANIMAL ID	0 0 2 3 1	0 0 2 3 2	0 0 2 3 3	0 0 2 3 4	0 0 2 3 5	0 0 2 3 6	0 0 2 3 7	0 0 2 3 8	0 0 2 3 9	0 0 2 4 0	* TOTALS
URINARY SYSTEM				-	-	-	-	-	-		
Kidney	+	+	+	+	+	+	+	+	+	+	10
SYSTEMIC LESIONS											
Multiple Organ	+	+	+	+	+	+	+	+	+	+	10

\*\*\* END OF REPORT \*\*\*

<sup>\* ..</sup> Total animals with tissue examined microscopically; Total animals with tumor

<sup>+ ..</sup> Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically