

Experiment Number: 20605 - 01
Test Type: 14-WEEK
Route: GAVAGE
Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Gum guggul extract
CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012
Time Report Requested: 11:06:53
First Dose M/F: 07/23/09 / 07/24/09
Lab: BAT

F1_Rev.1_HSD

NTP Study Number: C20605
Lock Date: 11/04/2010
Cage Range: ALL
Date Range: ALL
Reasons For Removal: ALL
Removal Date Range: ALL
Treatment Groups: Include ALL
Study Gender: Both
TDMSE Version: 2.6.0.0_007
PWG Approval Date: 05/11/2012

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 1

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906114

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|----------|-----------------------|---------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 2

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906115

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|----------|----------------|---------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Infarct | Mild |
| | Nephropathy | Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 3

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906116

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|------------------|-----------------------|---------------------|
| * Adrenal Cortex | Hypertrophy | Focal, Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Clear Cell Focus | |
| | Infiltration Cellular | Mixed Cell, Minimal |
| * Thyroid Gland | Cyst | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 4

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906117

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 5

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906118

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|----------|---|---------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Hepatodiaphragmatic Nodule Infiltration Cellular | Mixed Cell, Minimal |

[Hepatodiaphragmatic Nodule TGLs = 1-14]

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 6

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906119

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|----------|-----------------------|---------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 7

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906120

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 8

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906121

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

| | | |
|----------|-----------------------|---------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
| * Lung | Inflammation | Chronic, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 9

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906122

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Liver | Clear Cell Focus | |
| | Infiltration Cellular | Mixed Cell, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906123

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|-------------------|-----------------------|----------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
| * Preputial Gland | Inflammation | Chronic Active, Mild |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 11

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906124

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 12

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906125

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 13

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906126

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 14

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906127

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 15

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906128

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 16

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906129

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 17

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906130

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 18

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906131

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 19

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906132

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 20

TRT#: 3

SEX: Male

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906133

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 21

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906134

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 22

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906135

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 23

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906136

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 24

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906137

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

OBSERVATIONS

* Lymph Node, Mandibular

Hyperplasia

Lymphoid, Moderate

[Hyperplasia TGLs = 1-9]

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 25

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906138

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 26

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906139

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 27

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906140

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 28

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906141

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

INSUFFICIENT TISSUE

* Testes

Animal Note: TGL1-NCL

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 29

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906142

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 30

TRT#: 5

SEX: Male

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906143

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 31

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906144

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 32

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906145

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 33

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906146

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 34

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906147

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 35

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906148

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 36

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906149

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 37

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906150

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 38

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906151

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 39

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906152

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 40

TRT#: 7

SEX: Male

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906153

OBSERVATIONS

* Adrenal Cortex

Vacuolization Cytoplasmic

Diffuse, Minimal

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 41

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906154

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 42

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906155

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 43

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906156

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 44

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906157

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 45

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906158

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 46

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906159

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 47

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906160

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Liver

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 48

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906161

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

OBSERVATIONS

* Brain

Cerebrum

Hydrocephalus

Moderate

Note: Note: Hydrocephalus is unilateral. There is right cerebral hypoplasia/hydranencephaly.

[Hydrocephalus TGLs = 1-9]

* Liver

Hepatocyte

Hypertrophy

Diffuse, Mild

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 49

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906162

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 50

TRT#: 9

SEX: Male

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906163

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 51

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906164

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|--------------------------|----------------------------------|-------------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
| * Lymph Node, Mesenteric | Hyperplasia | Lymphoid, Mild |
| * Preputial Gland | Inflammation | Chronic Active, Minimal |
| * Spleen | Hematopoietic Cell Proliferation | Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 52

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906165

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|----------|----------------------------------|------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Hematopoietic Cell Proliferation | Minimal |
| | Infiltration Cellular | Mixed Cell, Mild |
| | Centrilobular | Acute, Mild |
| | Necrosis | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 53

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906166

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|----------|------------------|---------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Clear Cell Focus | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 54

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906167

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|----------|-----------------------|---------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 55

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906168

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | | |
|-------------------|---------------|-----------------------|----------------------|
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mixed Cell, Minimal |
| * Pituitary Gland | Pars Distalis | Hypertrophy | Diffuse, Minimal |
| * Preputial Gland | | Inflammation | Chronic Active, Mild |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 56

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906169

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|----------|-------------|---------|
| * Kidney | Nephropathy | Minimal |
|----------|-------------|---------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 57

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906170

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|-----------------|-----------------------|---------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
| * Thyroid Gland | Cyst | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 58

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906171

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|----------|-----------------------|---------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 59

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906172

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|-------------------|-----------------------|-------------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
| * Preputial Gland | Inflammation | Chronic Active, Minimal |
| * Thyroid Gland | Cyst | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 60

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906173

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | |
|------------------|-----------------------|---------------------|
| * Adrenal Cortex | Hypertrophy | Focal, Mild |
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 61

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906174

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Eye |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Spleen |
| * Stomach, Forestomach | * Stomach, Glandular | * Thymus | * Trachea |
| * Urinary Bladder | * Uterus | | |

OBSERVATIONS

- | | | |
|------------------|-----------------------|-------------------------|
| * Clitoral Gland | Inflammation | Chronic Active, Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
| * Thyroid Gland | Cyst | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 62

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906175

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

- | | | | |
|------------------|--------------|--------------|----------------------|
| * Clitoral Gland | | Inflammation | Chronic Active, Mild |
| * Kidney | Renal Tubule | Cyst | Minimal |
| | | Nephropathy | Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 63

TRT#: 2

SEX: Female

DAY ON TEST: 52

DOSE: 0 mg/kg

DISP: Natural Death

HISTO: 0906176

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Adrenal Medulla
- * Blood Vessel
- * Bone
- * Brain
- * Clitoral Gland
- * Esophagus
- * Eye
- * Intestine Large, Cecum
- * Intestine Large, Colon
- * Intestine Large, Rectum
- * Intestine Small, Duodenum
- * Intestine Small, Ileum
- * Intestine Small, Jejunum
- * Islets, Pancreatic
- * Kidney
- * Mammary Gland
- * Nose
- * Ovary
- * Pancreas
- * Parathyroid Gland
- * Pituitary Gland
- * Salivary Glands
- * Skin
- * Stomach, Forestomach
- * Stomach, Glandular
- * Thyroid Gland
- * Trachea
- * Urinary Bladder
- * Uterus

OBSERVATIONS

- * Bone Marrow
 - * Heart
 - * Liver
 - * Lung
 - * Lymph Node, Mandibular
 - * Lymph Node, Mesenteric
 - * Spleen
 - * Thymus
- | | | | |
|--|-------------|--------------|-----------------------|
| | Epicardium | Hyperplasia | Moderate |
| | Hepatocyte | Inflammation | Suppurative, Moderate |
| | | Atrophy | Mild |
| | | Congestion | Diffuse, Moderate |
| | Pleura | Inflammation | Suppurative, Moderate |
| | Mediastinum | Inflammation | Suppurative, Moderate |
| | | Atrophy | Mild |
| | | Atrophy | Moderate |
| | | Atrophy | Mild |
| | | Atrophy | Diffuse, Marked |
| | Mediastinum | Inflammation | Suppurative, Moderate |

PRIMARY CAUSE OF DEATH - Lung Pleura Inflammation
 CONTRIBUTORY CAUSE OF DEATH - Heart Epicardium Inflammation

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 64

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906177

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 65

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906178

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|--------------------------|----------------------------|---------------------------|-----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Eye |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Rectum | * Intestine Small, Duodenum |
| * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney |
| * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | |
|--------------------------|-----------------------|-------------------------|
| * Clitoral Gland | Inflammation | Chronic Active, Minimal |
| * Intestine Large, Colon | Parasite Metazoan | |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 66

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906179

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 67

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906180

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 68

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906181

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 69

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906182

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 70

TRT#: 2

SEX: Female

DAY ON TEST: 92

DOSE: 0 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906183

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 71

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906184

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 72

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906185

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 73

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906186

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 74

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906187

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 75

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906188

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 76

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906189

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 77

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906190

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 78

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906191

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 79

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906192

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 80

TRT#: 4

SEX: Female

DAY ON TEST: 92

DOSE: 62.5 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906193

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 81

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906194

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 82

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906195

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 83

TRT#: 6

SEX: Female

DAY ON TEST: 56

DOSE: 125 mg/kg

DISP: Moribund Sacrifice

HISTO: 0906196

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | Brain, Cerebrum | * Clitoral Gland |
| * Esophagus | * Eye | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Liver |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | |

OBSERVATIONS

- | | | | |
|----------------------------------|--------|--------------|---------------------|
| * Lung | Pleura | Inflammation | Suppurative, Marked |
| [Inflammation TGLs = 2,3-4+14] | | | |
| * Mammary Gland | | Carcinoma | |
| [Carcinoma TGLs = 1-13] | | | |
| * Spleen | | Hyperplasia | Lymphoid, Mild |
| * Thymus | | Atrophy | Diffuse, Mild |

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 84

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906197

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 85

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906198

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 86

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906199

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 87

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906200

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 88

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906201

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

Lymph Node

Renal

Hyperplasia

Mild

Renal

Pigmentation

Minimal

[Pigmentation TGLs = 1-13]

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 89

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906202

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 90

TRT#: 6

SEX: Female

DAY ON TEST: 92

DOSE: 125 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906203

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 91

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906204

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 92

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906205

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 93

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906206

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 94

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906207

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 95

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906208

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Liver

OBSERVATIONS

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 96

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906209

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 97

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906210

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 98

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906211

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 99

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906212

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 100

TRT#: 8

SEX: Female

DAY ON TEST: 92

DOSE: 250 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906213

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 101

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906214

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 102

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906215

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Vacuolization Cytoplasmic

Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 103

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906216

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 104

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906217

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 105

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906218

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 106

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906219

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 107

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906220

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 108

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906221

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Thyroid Gland

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 109

TRT#: 10

SEX: Female

DAY ON TEST: 57

DOSE: 500 mg/kg

DISP: Dosing Accident

HISTO: 0906222

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Liver | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thyroid Gland |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

- * Parathyroid Gland

OBSERVATIONS

- | | | | |
|---------------------------------|-------------|-------------------------|--|
| * Lung | Pleura | Inflammation | Suppurative, Moderate |
| [Inflammation TGLs = 1,2-3+4] | | | |
| * Thymus | Mediastinum | Atrophy Inflammation | Diffuse, Moderate Suppurative, Mild |

Note: Edema/fibrin present and coded as inflammation.

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 110

TRT#: 10

SEX: Female

DAY ON TEST: 92

DOSE: 500 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906223

OBSERVATIONS

* Liver

Infiltration Cellular

Mixed Cell, Minimal

* Thyroid Gland

Cyst

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 111

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906224

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Medulla | * Blood Vessel | * Bone | * Bone Marrow |
| * Brain | * Clitoral Gland | * Esophagus | * Eye |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Kidney | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Thyroid Gland | * Trachea | * Urinary Bladder | * Uterus |

OBSERVATIONS

| | | |
|------------------|-----------------------|---------------------|
| * Adrenal Cortex | Hypertrophy | Focal, Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 112

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906225

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 113

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906226

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|-----------------------------|--------------------------|----------------------------|---------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Esophagus | * Eye |
| * Heart | * Intestine Large, Cecum | * Intestine Large, Colon | * Intestine Large, Rectum |
| * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum | * Islets, Pancreatic |
| * Liver | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Trachea | * Urinary Bladder | * Uterus | |

OBSERVATIONS

- | | | |
|------------------|--------------|-------------------------|
| * Clitoral Gland | Inflammation | Chronic Active, Minimal |
| * Kidney | Nephropathy | Minimal |
| * Thyroid Gland | Cyst | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 114

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906227

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Liver | * Lung |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | |
|-----------------|------|
| * Thyroid Gland | Cyst |
|-----------------|------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 115

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906228

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Liver | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Trachea | * Urinary Bladder | * Uterus |

OBSERVATIONS

| | | |
|-----------------|-------------|---------|
| * Kidney | Nephropathy | Minimal |
| * Thyroid Gland | Cyst | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 116

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906229

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | |

OBSERVATIONS

| | | |
|-----------------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
| * Thymus | Pigmentation | Hemosiderin, Mild |
| * Thyroid Gland | Cyst | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 117

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906230

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Lung | * Lymph Node, Mandibular | * Lymph Node, Mesenteric |
| * Mammary Gland | * Nose | * Ovary | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Salivary Glands | * Skin |
| * Spleen | * Stomach, Forestomach | * Stomach, Glandular | * Thymus |
| * Trachea | * Urinary Bladder | * Uterus | |

OBSERVATIONS

| | | |
|-----------------|-----------------------|---------------------|
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
| * Thyroid Gland | Cyst | |

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 118

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906231

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 119

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906232

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Lung | * Lymph Node, Mandibular |
| * Lymph Node, Mesenteric | * Mammary Gland | * Nose | * Ovary |
| * Pancreas | * Parathyroid Gland | * Pituitary Gland | * Salivary Glands |
| * Skin | * Spleen | * Stomach, Forestomach | * Stomach, Glandular |
| * Thymus | * Thyroid Gland | * Trachea | * Urinary Bladder |
| * Uterus | | | |

OBSERVATIONS

- | | | |
|---------|-----------------------|---------------------|
| * Liver | Infiltration Cellular | Mixed Cell, Minimal |
|---------|-----------------------|---------------------|

Experiment Number: 20605 - 01

Test Type: 14-WEEK

Route: GAVAGE

Species/Strain: RATS/HSD

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Gum guggul extract

CAS Number: GUMGUGGULEXT

Date Report Requested: 08/08/2012

Time Report Requested: 11:06:53

First Dose M/F: 07/23/09 / 07/24/09

Lab: BAT

ANIMAL ID: 120

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 1000 mg/kg

DISP: Terminal Sacrifice

HISTO: 0906233

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|---------------------------|-----------------------------|--------------------------|----------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Heart | * Intestine Large, Cecum | * Intestine Large, Colon |
| * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum | * Intestine Small, Jejunum |
| * Islets, Pancreatic | * Kidney | * Liver | * Lung |
| * Lymph Node, Mandibular | * Lymph Node, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Spleen | * Stomach, Forestomach |
| * Stomach, Glandular | * Thymus | * Thyroid Gland | * Trachea |
| * Urinary Bladder | * Uterus | | |

*** END OF REPORT ***