

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

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

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

| | | | |
|---------------------|---------------------|---------------------------------|------------------------|
| ANIMAL ID: 1 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304802 |

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, 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 | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|-------------------|--------------|-----------------------|-------------------------|
| * Harderian Gland | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | Interstitium | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

| | | | |
|---------------------|---------------------|---------------------------------|------------------------|
| ANIMAL ID: 2 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304803 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Metaplasia | Osseous, Focal, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

| | | | |
|---------------------|---------------------|---------------------------------|------------------------|
| ANIMAL ID: 3 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304804 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

OBSERVATIONS

- | | | |
|----------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Mild |
| * Kidney | Mineralization | Minimal |
| | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Nose | Inflammation | Suppurative, Minimal |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

| | | | |
|---------------------|---------------------|---------------------------------|------------------------|
| ANIMAL ID: 4 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304805 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|----------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

| | | | |
|---------------------|---------------------|---------------------------------|------------------------|
| ANIMAL ID: 5 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304806 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

OBSERVATIONS

- | | | | |
|------------|-----------------|---------------------------|-------------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Vacuolization Cytoplasmic | Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 6

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304807

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|---|-------------------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Accumulation, Hyaline Droplet | Mild |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Metaplasia | Osseous, Minimal |
| Note: Eosinophilic crystals noted in alveoli. | | |
| * Thyroid Gland | Cyst | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

| | | | |
|---------------------|---------------------|---------------------------------|------------------------|
| ANIMAL ID: 7 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304808 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|-----------------|---------------|-------------------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Accumulation, Hyaline Droplet | Mild |
| | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Nose | Squam Epithel | Hyperplasia | Squamous, Minimal |
| * Thyroid Gland | | Cyst | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

| | | | |
|---------------------|---------------------|---------------------------------|------------------------|
| ANIMAL ID: 8 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304809 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|--------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Mild |
| * Kidney | | Casts Protein | Minimal |
| * Lung | Interstitium | Infiltration Cellular | Mononuclear CI, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

| | | | |
|---------------------|---------------------|---------------------------------|------------------------|
| ANIMAL ID: 9 | TRT#: 1 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304810 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

| | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

OBSERVATIONS

| | | |
|-------------------|----------------------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Mineralization | Minimal |
| | Nephropathy | Minimal |
| * Liver | Hematopoietic Cell Proliferation | Minimal |
| | Infiltration Cellular | Mononuclear CI, Minimal |
| * Pituitary Gland | Pars Distalis Hypertrophy | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 10

TRT#: 1

SEX: Male

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304811

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|--------------|----------|-----------------------|-------------------------|
| * Epididymis | | Inflammation | Minimal |
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 11

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304812

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 12

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304813

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 13

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304814

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 14

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304815

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 15

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304816

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 16

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304817

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 17

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304818

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hematopoietic Cell Proliferation

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 18

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304819

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 19

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304820

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 20

TRT#: 3

SEX: Male

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304821

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 21

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304822

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 22

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304823

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 23

TRT#: 5

SEX: Male

DAY ON TEST: 22

DOSE: 0.25 G/KG

DISP: Moribund Sacrifice

HISTO: 0304824

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|--------------------------|-------------------------|---------------------------|------------------------|
| Adrenal Cortex | Adrenal Medulla | Blood Vessel | Bone |
| Bone Marrow | Brain | Epididymis | Esophagus |
| Eye | Harderian Gland | 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, 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 |

MISSING

Lymph Node, Mandibular

PRIMARY CAUSE OF DEATH -

Animal Note: COD = chylothorax

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 24

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304825

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 25

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304826

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 26

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304827

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 27

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304828

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 28

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304829

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 29

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304830

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 30

TRT#: 5

SEX: Male

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304831

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 31

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304832

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatodiaphragmatic Nodule

[Hepatodiaphragmatic Nodule TGLS = 1-14]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 32

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304833

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|----------------------|-----------------------|---------------------------------|------------------------|
| ANIMAL ID: 33 | TRT#: 7 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0.5 G/KG | DISP: Terminal Sacrifice | HISTO: 0304834 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | |
|-------------|--------|--------|
| Bone Marrow | Spleen | Thymus |
|-------------|--------|--------|

OBSERVATIONS

| | | | |
|---------|-----------|--------------------------------------|------------------------------------|
| * Liver | Bile Duct | Hyperplasia Infiltration Cellular | Minimal Mononuclear CI, Minimal |
|---------|-----------|--------------------------------------|------------------------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 34

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304835

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 35

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304836

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 36

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304837

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|----------------------|-----------------------|---------------------------------|------------------------|
| ANIMAL ID: 37 | TRT#: 7 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 0.5 G/KG | DISP: Terminal Sacrifice | HISTO: 0304838 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | |
|-------------|--------|--------|
| Bone Marrow | Spleen | Thymus |
|-------------|--------|--------|

OBSERVATIONS

| | | |
|---------|-----------------------|-------------------------|
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
|---------|-----------------------|-------------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 38

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304839

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 39

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304840

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Vacuolization Cytoplasmic

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 40

TRT#: 7

SEX: Male

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304841

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 41

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304842

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 42

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304843

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 43

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304844

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 44

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304845

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Spleen

* Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 45

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304846

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Thymus

OBSERVATIONS

* Spleen

Hematopoietic Cell Proliferation

Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 46

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304847

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 47

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304848

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 48

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304849

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Spleen

* Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 49

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304850

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Spleen

* Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 50

TRT#: 9

SEX: Male

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304851

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 51

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304852

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---------|--------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | | Infiltration Cellular | Mixed Cell, Minimal |
| * Lung | Interstitial | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Inflammation | Minimal |

Note: subpleural inflammation (slide 3)

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 52

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304853

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|------------------------------|-----------------|-----------------------|-------------------------|
| * Epididymis | | | |
| Note: one epididymis missing | | | |
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Inflammation | Chronic, Minimal |
| * Thyroid Gland | | Cyst | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 53

TRT#: 11

SEX: Male

DAY ON TEST: 80

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304854

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|------------------------|----------------|------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Lung | Inflammation | Granulomatous, Minimal |
| * Spleen | Atrophy | Mild |
| * Stomach, Forestomach | Mineralization | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|----------------------|-----------------------|---------------------------------|------------------------|
| ANIMAL ID: 54 | TRT#: 11 | SEX: Male | DAY ON TEST: 93 |
| | DOSE: 2.0 G/KG | DISP: Terminal Sacrifice | HISTO: 0304855 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, 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 | | |

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---------|--------------|-----------------------|-------------------------|
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitial | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Inflammation | Granulomatous, Minimal |
| | | Metaplasia | Osseous, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 55

TRT#: 11

SEX: Male

DAY ON TEST: 80

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304856

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | |
|------------------------|----------------|---------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Nephropathy | Minimal |
| * Lung | Inflammation | Minimal |
| * Spleen | Atrophy | Minimal |
| * Stomach, Forestomach | Inflammation | Minimal |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 56

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304857

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| | | Nephropathy | Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 57

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304858

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|----------|-------------------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Accumulation, Hyaline Droplet | Mild |
| | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Inflammation | Minimal |
| * Nose | Inflammation | Acute, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 58

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304859

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

| | |
|--------------------------|---------------------|
| * Lymph Node, Mandibular | * Parathyroid Gland |
|--------------------------|---------------------|

OBSERVATIONS

| | | |
|-------------------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Mineralization | Minimal |
| | Nephropathy | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Preputial Gland | Inflammation | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 59

TRT#: 11

SEX: Male

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304860

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Nephropathy | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| * Nose | | Inflammation | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 60

TRT#: 11

SEX: Male

DAY ON TEST: 5

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304861

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Epididymis | * Esophagus |
| * Eye | * Harderian Gland | * 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, Mesenteric | * Nose | * Pancreas |
| * Parathyroid Gland | * Pituitary Gland | * Preputial Gland | * Prostate |
| * Salivary Glands | * Skin | * Stomach, Glandular | * Testes |
| * Thyroid Gland | * Trachea | * Urinary Bladder | |

MISSING

- | | |
|--------------------------|-----------------|
| * Lymph Node, Mandibular | * Mammary Gland |
|--------------------------|-----------------|

OBSERVATIONS

- | | | |
|------------------------|----------|----------|
| * Seminal Vesicle | Atrophy | Moderate |
| * Spleen | Atrophy | Mild |
| * Stomach, Forestomach | Ulcer | Mild |
| * Thymus | Necrosis | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 61

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304862

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|----------|----------------------------|-------------------------|
| * Kidney | Mineralization | Minimal |
| * Liver | Hepatodiaphragmatic Nodule | |
| | Infiltration Cellular | Mononuclear CI, Minimal |

[Hepatodiaphragmatic Nodule TGLS = 1-13]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 62

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304863

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|----------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| | | Inflammation | Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | | Inflammation | Chronic, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 63

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304864

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|-----------------|-----------------------|-------------------------|
| * Heart | Cardiomyopathy | Minimal |
| * Kidney | Mineralization | Minimal |
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Metaplasia | Osseous, Minimal |
| * Thyroid Gland | Cyst | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 64

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304865

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Adrenal Cortex

* Bone Marrow

* Eye

* Intestine Large, Colon

* Intestine Small, Jejunum

* Mammary Gland

* Parathyroid Gland

* Spleen

* Thyroid Gland

* Adrenal Medulla

* Brain

* Harderian Gland

* Intestine Large, Rectum

* Islets, Pancreatic

* Nose

* Pituitary Gland

* Stomach, Forestomach

* Trachea

* Blood Vessel

* Clitoral Gland

* Heart

* Intestine Small, Duodenum

* Lung

* Ovary

* Salivary Glands

* Stomach, Glandular

* Urinary Bladder

* Bone

* Esophagus

* Intestine Large, Cecum

* Intestine Small, Ileum

* Lymph Node, Mesenteric

* Pancreas

* Skin

* Thymus

* Uterus

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

* Kidney

* Liver

Mineralization

Infiltration Cellular

Minimal

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 65

TRT#: 2

SEX: Female

DAY ON TEST: 18

DOSE: 0 G/KG

DISP: Moribund Sacrifice

HISTO: 0304866

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- | | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * 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, Mesenteric | * Mammary Gland | * Nose |
| * Ovary | * Pancreas | * Parathyroid Gland | * Pituitary Gland |
| * Salivary Glands | * Skin | * Stomach, Forestomach | * Stomach, Glandular |
| * Trachea | * Urinary Bladder | * Uterus | |

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | |
|-----------------|----------|------|
| * Spleen | Atrophy | Mild |
| * Thymus | Necrosis | Mild |
| * Thyroid Gland | Cyst | |

PRIMARY CAUSE OF DEATH

-

Animal Note: COD = chylothorax

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 66

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304867

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 67

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304868

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Bone Marrow
- * Eye
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Mammary Gland
- * Parathyroid Gland
- * Spleen
- * Thyroid Gland

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Nose
- * Pituitary Gland
- * Stomach, Forestomach
- * Trachea

- * Blood Vessel
- * Clitoral Gland
- * Heart
- * Intestine Small, Duodenum
- * Lung
- * Ovary
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

- * Bone
- * Esophagus
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Lymph Node, Mesenteric
- * Pancreas
- * Skin
- * Thymus
- * Uterus

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- * Kidney
 - * Liver
 - Mesentery
- Note: TGL1 = mesenteric fat nodule
[Necrosis TGLS = 1-13]

Mineralization
Infiltration Cellular
Necrosis

Minimal
Mononuclear CI, Minimal
Focal, Mild

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 68

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304869

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|---|-----------------|----------------------------|-------------------------|
| * Kidney | | Mineralization | Minimal |
| * Liver | | Hepatodiaphragmatic Nodule | |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| [Hepatodiaphragmatic Nodule TGLS = 1-7] | | | |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 69

TRT#: 2

SEX: Female

DAY ON TEST: 93

DOSE: 0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304870

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|-----------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Kidney | | Mineralization | Minimal |
| * Liver | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Interstitialium | Infiltration Cellular | Mononuclear CI, Minimal |
| * Uterus | | | |

Note: Dilatation of uterine horns noted (bilateral) and is considered physiologic.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 70

TRT#: 2

DOSE: 0 G/KG

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 93

HISTO: 0304871

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- * Adrenal Cortex
- * Bone Marrow
- * Eye
- * Intestine Large, Rectum
- * Islets, Pancreatic
- * Lymph Node, Mesenteric
- * Pancreas
- * Skin
- * Thymus
- * Uterus

- * Adrenal Medulla
- * Brain
- * Harderian Gland
- * Intestine Small, Duodenum
- * Kidney
- * Mammary Gland
- * Parathyroid Gland
- * Spleen
- * Thyroid Gland

- * Blood Vessel
- * Clitoral Gland
- * Intestine Large, Cecum
- * Intestine Small, Ileum
- * Liver
- * Nose
- * Pituitary Gland
- * Stomach, Forestomach
- * Trachea

- * Bone
- * Esophagus
- * Intestine Large, Colon
- * Intestine Small, Jejunum
- * Lung
- * Ovary
- * Salivary Glands
- * Stomach, Glandular
- * Urinary Bladder

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- * Heart Cardiomyopathy Minimal
- * Uterus

Note: Note: bilateral dilatation of uterine horns of which is considered physiologic.

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 71

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304872

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|----------------------|-------------------------|---------------------------------|------------------------|
| ANIMAL ID: 72 | TRT#: 4 | SEX: Female | DAY ON TEST: 93 |
| | DOSE: 0.125 G/KG | DISP: Terminal Sacrifice | HISTO: 0304873 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | |
|-------------|--------|--------|
| Bone Marrow | Spleen | Thymus |
|-------------|--------|--------|

OBSERVATIONS

| | | |
|---------|-----------------------|-------------------------|
| * Liver | Infiltration Cellular | Mononuclear CI, Minimal |
|---------|-----------------------|-------------------------|

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 73

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304874

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 74

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304875

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 75

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304876

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 76

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304877

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 77

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304878

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatodiaphragmatic Nodule

Infiltration Cellular

Mononuclear CI, Minimal

[Hepatodiaphragmatic Nodule TGLS = 1-13]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 78

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304879

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 79

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304880

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 80

TRT#: 4

SEX: Female

DAY ON TEST: 93

DOSE: 0.125 G/KG

DISP: Terminal Sacrifice

HISTO: 0304881

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 81

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304882

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 82

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304883

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 83

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304884

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 84

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304885

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 85

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304886

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 86

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304887

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 87

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304888

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 88

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304889

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 89

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304890

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 90

TRT#: 6

SEX: Female

DAY ON TEST: 93

DOSE: 0.25 G/KG

DISP: Terminal Sacrifice

HISTO: 0304891

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 91

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304892

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 92

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304893

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

| | | | |
|----------------------|-----------------------|---------------------------------|------------------------|
| ANIMAL ID: 93 | TRT#: 8 | SEX: Female | DAY ON TEST: 93 |
| | DOSE: 0.5 G/KG | DISP: Terminal Sacrifice | HISTO: 0304894 |

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | |
|-------------|--------|--------|
| Bone Marrow | Spleen | Thymus |
|-------------|--------|--------|

OBSERVATIONS

| | | |
|--|---|-------------------------|
| * Liver | Hepatodiaphragmatic Nodule Infiltration Cellular | Mononuclear CI, Minimal |
| [Hepatodiaphragmatic Nodule TGLS = 1-13] | | |

PRIMARY CAUSE OF DEATH -

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 94

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304895

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 95

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304896

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 96

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304897

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 97

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304898

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

* Liver

Spleen

Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 98

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304899

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

Infiltration Cellular

Mononuclear CI, Minimal

Mesentery

Necrosis

Fatty, Mild

[Necrosis TGLS = 1-13]

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 99

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304900

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 100

TRT#: 8

SEX: Female

DAY ON TEST: 93

DOSE: 0.5 G/KG

DISP: Terminal Sacrifice

HISTO: 0304901

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

Bone Marrow

Spleen

Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 101

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304902

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 102

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304903

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Liver

* Spleen

* Thymus

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 103

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304904

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 104

TRT#: 10

SEX: Female

DAY ON TEST: 32

DOSE: 1.0 G/KG

DISP: Natural Death

HISTO: 0304905

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|------------------------------|--------------|-----------------------|-------------------------|
| Kidney | | Mineralization | Minimal |
| * Liver | | Congestion | Mild |
| | Hepatocyte | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| [Hypertrophy TGLS = 1-6+7] | | | |
| Lung | Interstitial | Infiltration Cellular | Mononuclear CI, Minimal |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 105

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304906

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 106

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304907

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 107

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304908

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 108

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304909

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Infiltration Cellular

Mononuclear CI, Minimal

Inflammation

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 109

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304910

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy

Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 110

TRT#: 10

SEX: Female

DAY ON TEST: 93

DOSE: 1.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304911

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

* Bone Marrow

* Spleen

* Thymus

OBSERVATIONS

* Liver

Hepatocyte

Hypertrophy
Infiltration Cellular

Minimal
Mononuclear CI, Minimal

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 111

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304912

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|----------|--------------|-----------------------|-------------------------|
| * Kidney | | Mineralization | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| | Interstitium | Infiltration Cellular | Mononuclear CI, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 112

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304913

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-----------------|------------|--------------------|---------|
| * Eye | Cornea | Neovascularization | Mild |
| * Kidney | | Mineralization | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Minimal |
| * Thyroid Gland | | Cyst | |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 113

TRT#: 12

SEX: Female

DAY ON TEST: 4

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304914

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 | * Lymph Node, Mesenteric | * Mammary Gland |
| * Nose | * Ovary | * Pancreas | * Parathyroid Gland |
| * Pituitary Gland | * Salivary Glands | * Skin | * Stomach, Forestomach |
| * Stomach, Glandular | * Trachea | * Urinary Bladder | * Uterus |

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|-------------------|------------|-----------------------|----------------------|
| * Harderian Gland | | Infiltration Cellular | Mononuclear CI, Mild |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Lung | | Congestion | Acute, Diffuse, Mild |
| * Spleen | | Atrophy | Mild |
| * Thymus | | Necrosis | Mild |
| * Thyroid GI | | | |

Note: Cyst is Keratin.

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 114

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304915

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---------|------------|-----------------------|-------------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Minimal |
| | | Infiltration Cellular | Mononuclear CI, Minimal |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 115

TRT#: 12

DOSE: 2.0 G/KG

SEX: Female

DISP: Terminal Sacrifice

DAY ON TEST: 93

HISTO: 0304916

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

| | | | |
|----------------------------|---------------------------|-----------------------------|--------------------------|
| * Adrenal Cortex | * Adrenal Medulla | * Blood Vessel | * Bone |
| * Bone Marrow | * Brain | * Clitoral Gland | * Esophagus |
| * Eye | * Harderian Gland | * Heart | * Intestine Large, Cecum |
| * Intestine Large, Colon | * Intestine Large, Rectum | * Intestine Small, Duodenum | * Intestine Small, Ileum |
| * Intestine Small, Jejunum | * Islets, Pancreatic | * Kidney | * Lymph Node, 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 |

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|---------|--------------|-----------------------|-------------------------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Lung | Interstitium | Infiltration Cellular | Mononuclear CI, Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 116

TRT#: 12

SEX: Female

DAY ON TEST: 44

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304917

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|------------|------------|-----------------------|---------------------|
| * Heart | | Cardiomyopathy | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Lung | Alveolus | Infiltration Cellular | Histiocyte, Minimal |
| * Pancreas | Acinus | Atrophy | Minimal |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 117

TRT#: 12

SEX: Female

DAY ON TEST: 2

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304918

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|--------------------------------------|--------------|-----------------------|-------------------------|
| * Brain [Hemorrhage TGLS = 1-9] | Cerebrum | Hemorrhage | Mild |
| * Liver | Hepatocyte | Hypertrophy | Moderate |
| * Lung | Interstitium | Infiltration Cellular | Mononuclear CI, Minimal |
| * Spleen | | Atrophy | Mild |
| * Thymus | | Necrosis | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 118

TRT#: 12

SEX: Female

DAY ON TEST: 4

DOSE: 2.0 G/KG

DISP: Natural Death

HISTO: 0304919

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|------------------------|------------|----------------|---------|
| * Liver | Hepatocyte | Hypertrophy | Mild |
| * Spleen | | Atrophy | Mild |
| * Stomach, Forestomach | | Mineralization | Minimal |
| | | Ulcer | Mild |
| * Thymus | | Necrosis | Mild |

PRIMARY CAUSE OF DEATH

- UNCERTAIN

* PROTOCOL REQUIRED TISSUE

Experiment Number: 20007-03

Test Type: 90-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: Kava kava extract

CAS Number: 9000-38-8

Date Report Requested: 10/17/2014

Time Report Requested: 21:45:25

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 119

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304920

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

- * Lymph Node, Mandibular

OBSERVATIONS

- | | | | |
|---|------------|---------------------------------------|--------------------------------|
| * Liver | Hepatocyte | Hypertrophy | Minimal |
| * Lung | Alveolus | Infiltration Cellular Inflammation | Histiocyte, Minimal Minimal |
| Note: Few eosinophilic crystals noted in alveoli (slide 3). | | | |
| * Stomach, Forestomach | | Inflammation | Minimal |

PRIMARY CAUSE OF DEATH

-

* PROTOCOL REQUIRED TISSUE

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

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA
Test Compound: Kava kava extract
CAS Number: 9000-38-8

Date Report Requested: 10/17/2014
Time Report Requested: 21:45:25
First Dose M/F: NA / NA
Lab: BAT

ANIMAL ID: 120

TRT#: 12

SEX: Female

DAY ON TEST: 93

DOSE: 2.0 G/KG

DISP: Terminal Sacrifice

HISTO: 0304921

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

MISSING

* Lymph Node, Mandibular

OBSERVATIONS

| | | | |
|----------|------------|--------------------|---------|
| * Eye | Cornea | Neovascularization | Mild |
| * Kidney | | Mineralization | Minimal |
| * Liver | Hepatocyte | Hypertrophy | Minimal |

PRIMARY CAUSE OF DEATH

-

**** END OF REPORT ****

* PROTOCOL REQUIRED TISSUE