

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**C Number:** C56519

**Cage Range:** All

**Date Range:** All

**Reasons For Removal:** All

**Removal Date Range:** All

**Treatment Groups:** All

**Study Gender:** Female

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_051

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Esophagus		Ulcer, Nos
Heart		Inflammation, Chronic
Intestine Small	Duodenum	Bezoar
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
		Edema, Nos
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Forestomach	Inflammation, Acute
	Forestomach	Ulcer, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_052

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Esophagus		Inflammation, Acute
Heart		Inflammation, Chronic
Intestine Small	Duodenum	Bezoar
Kidney	Tubule	Mineralization
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Forestomach	Inflammation, Acute
	Forestomach	Ulcer, Nos

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_053

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Cortex Nos	Degeneration, Lipoid Hyperplasia, Nos
Brain		Compression, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
Liver	Tubule Bile Duct Periportal	Pigmentation, Nos Focal Cellular Change Hyperplasia, Nos Inflammation, Chronic
Mammary gland		Cyst, Multiple Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_054

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Pancreas	Acinus	Atrophy, Nos
	Islets	Focal Cellular Change
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_055

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Histiocytosis
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Focal Cellular Change
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_056

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Blood vessel	Pulmonary Artery Nos	Mineralization
Brain		Compression, Nos
Clitoral gland		Adenoma, Nos
		Carcinoma, Nos
Heart		Inflammation, Chronic
Kidney		Inflammation, Chronic
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Hematoma, Organized

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_057

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Cytoplasmic Vacuolization
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Pigmentation, Nos
Thymus		Congestion, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_058

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic Hemorrhage
Lung		Cyst, Multiple
Mammary gland		
Nasal cavity	Turbinates Nos	Inflammation, Active Chronic
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Nos
	Anterior Pituitary	Pigmentation, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		C-Cell Adenoma Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

---

**ANIMAL ID:** 1\_059

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

---

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Eye	Nasolacrimal Duct	Hemorrhage
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver	Periportal	Inflammation, Chronic
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Uterus		Hydrometra

---

**PRIMARY CAUSE OF DEATH**

-

---

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_060

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Blood vessel	Pulmonary Artery Nos	Mineralization
Kidney	Tubule	Pigmentation, Nos
Liver	Bile Duct	Focal Cellular Change
	Periportal	Hyperplasia, Nos
Lung		Inflammation, Chronic
		Edema, Nos
		Hemorrhage
Spleen	Bronchiole	Inflammation, Acute
		Hematopoiesis
		Pigmentation, Nos
Uterus		Dilatation, Nos

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_061

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Adenoma, Nos Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Plasmacytosis
Mammary gland		Cyst, Multiple
Pancreas		Lymphocytic Inflammatory Infiltrate
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Dilatation, Nos Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_062

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Angiectasis
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
		Necrosis, Nos
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_063

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 375.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Suppurative
Eye	Nasolacrimal Duct	Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Nephropathy
Liver		Pigmentation, Nos
	Bile Duct	Focal Cellular Change
	Periportal	Hyperplasia, Nos
Lymph node	Mandibular Lymph Node	Inflammation, Chronic
Mammary gland		Hyperplasia, Lymphoid
		Cyst, Multiple
Pancreas	Acinus	Fibroadenoma
Pituitary gland	Anterior Pituitary	Atrophy, Nos
	Anterior Pituitary	Adenoma, Nos
Spleen		Cyst, Multiple
		Hematopoiesis
Stomach	Fundal Gland	Pigmentation, Nos
Thyroid		Dilatation, Nos
		Cyst, Embryonal Duct
Unspecified	Multiple Organs Nos	Hyperplasia, C Cell
Uterus	Endometrium	Leukemia, Mononuclear Cell
		Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_064

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Blood vessel	Pulmonary Artery Nos	Mineralization
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_065

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
Liver	Tubule Bile Duct Periportal	Pigmentation, Nos Hyperplasia, Nos Inflammation, Chronic Necrosis, Nos
Mammary gland		Cyst, Multiple
Nasal cavity	Turbinates Nos	Inflammation, Active Chronic
Pituitary gland	Anterior Pituitary Anterior Pituitary	Hemorrhage Hyperplasia, Nos
Spleen		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_066

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Cyst, Multiple
		Fibroadenoma
Nasal cavity		Hemorrhage
		Inflammation, Chronic
Pancreas	Acinus	Focal Cellular Change
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_067

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic Hemorrhage
Lung		Fibroadenoma
Mammary gland		Atrophy, Nos
Pancreas	Acinus	Cyst, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
	Anterior Pituitary	Hematopoiesis Pigmentation, Nos
Spleen		Dilatation, Nos
Stomach	Fundal Gland	Hyperplasia, C Cell
Thyroid		Hyperplasia, Cystic
Uterus	Endometrium	

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_068

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 375.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Bronchopneumonia, Chronic
		Hemorrhage
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
	Glandular Stomach	Inflammation, Active Chronic
Thyroid		Cystic Follicles
		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_069

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
Mammary gland		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
	Acinus	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_070

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Pheochromocytoma
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_071

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic Hemorrhage
Lung		Inflammation, Chronic
Nasal cavity	Turbinates Nos	Atrophy, Nos
Pancreas	Acinus	Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 1\_072

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Heart		Inflammation, Chronic
Intestine Small	Duodenum	Bezoar
Kidney	Tubule	Mineralization
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Spleen		Pigmentation, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_073

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin	Face	Squamous Cell Carcinoma
Spleen		Hematopoiesis
		Hyperplasia, Lymphoid
Thyroid		Pigmentation, Nos
		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp
		Endometrial Stromal Sarcoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_074

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Ovary	Mesovarium	Steatitis
Pituitary gland	Anterior Pituitary	Cyst, Hemorrhagic
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_075

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla Medulla	Degeneration, Lipoid Hyperplasia, Nos Pheochromocytoma
Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_076

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 375.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Accessory Structure
Brain		Compression, Nos
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Cytoplasmic Vacuolization
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Acute
	Forestomach	Ulcer, Nos
Thymus		Cyst, Multiple

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_077

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
	Glandular Stomach	Dysplasia, Epithelial
Thyroid		Hyperplasia, C Cell
Uterus		Dilatation, Nos Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_078

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Brain		Compression, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles
		Hyperplasia, C Cell
Unspecified	Pelvis	Fibroma
Uterus		Endometrial Stromal Sarcoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_079

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 375.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Mammary gland		Cyst, Multiple
Nasal cavity		Hemorrhage
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Nos
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 1\_080

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Congestion, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
Liver		Inflammation, Acute
	Periportal	Inflammation, Chronic
Lung		Foreign Material, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Forestomach	Inflammation, Acute
	Forestomach	Ulcer, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_081

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
	Forestomach	Inflammation, Active Chronic
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_082

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles
		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_083

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Pheochromocytoma
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule  Tubule	Mineralization Nephropathy Pigmentation, Nos
Liver		Granuloma, Nos
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary Anterior Pituitary	Adenoma, Nos Cyst, Multiple
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Thyroid		C-Cell Carcinoma Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_084

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
	Cortex Nos	Necrosis, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 1\_085

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Accessory Structure
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Ovary		Cyst, Parovarian
Spleen		Pigmentation, Nos
Stomach	Forestomach	Inflammation, Acute
	Forestomach	Ulcer, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_086

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Chronic
Eye	Sclera	Mineralization
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_087

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Bronchopneumonia, Chronic Histiocytosis
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Leiomyosarcoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_088

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Metamorphosis, Fatty Necrosis, Nos
Kidney	Cortex Nos Pelvis Tubule	Pigmentation, Nos Hemorrhage Mineralization Nephropathy
Liver	Tubule	Pigmentation, Nos Accessory Structure Bile Stasis Cytoplasmic Vacuolization
Mammary gland		Cyst, Multiple
Nasal cavity	Turbinate Nos	Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Cyst, Nos
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_089

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Adenoma, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Granuloma, Pyogenic
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thymus		Hemorrhage
Thyroid	Follicle	Atrophy, Focal
		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_090

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 375.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
	Cortex Nos	Hypertrophy, Focal
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Angiectasis
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Congestion, Nos
Mammary gland		Adenoma, Nos
		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_091

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Esophagus		Necrosis, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
		Necrosis, Nos
Lung		Congestion, Nos
Nasal cavity		Foreign Material, Nos
		Hemorrhage
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Pigmentation, Nos
Stomach	Forestomach	Inflammation, Acute

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_092

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Pheochromocytoma
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Pelvis Tubule	Calculus, Microscopic Examination Mineralization Nephropathy
Liver	Tubule	Pigmentation, Nos Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_093

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Pelvis	Mineralization Nephropathy
	Tubule	Pigmentation, Nos Cytoplasmic Vacuolization Focal Cellular Change
Liver		Hyperplasia, Nos Fibroadenoma
	Bile Duct	Inflammation, Chronic
Mammary gland		Atrophy, Nos
Nasal cavity	Acinus	Cyst, Nos
Pancreas	Anterior Pituitary	Cyst, Nos
Pituitary gland	Intermedia	Hematopoiesis Pigmentation, Nos
Spleen		Dilatation, Nos
	Fundal Gland	Cystic Follicles
Stomach		
Thyroid		

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_094

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos Focal Cellular Change Hemorrhage
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_095

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_096

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 375.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Blood vessel	Aorta Nos	Periarteritis
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 1\_097

**TRT#:** 1

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 375.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Pheochromocytoma
Heart		Inflammation, Chronic
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Congestion, Nos
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Preputial gland		Inflammation, Chronic
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_098

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 375.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Pheochromocytoma
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Nasal cavity		Hemorrhage
Ovary		Cyst, Parovarian
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Hyperplasia, Nos
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 1\_099

TRT#: 1

SEX: Female

DAY ON TEST:

DOSE: 375.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Nos
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Pneumonia, Interstitial Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 1\_100

**TRT#:** 1  
**DOSE:** 375.0 MG/KG

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hypertrophy, Focal
Brain		Compression, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Congestion, Nos
		Edema, Nos
		Histiocytosis
Lymph node	Mandibular Lymph Node	Congestion, Nos
Mammary gland		Cyst, Multiple
Nasal cavity	Turbinates Nos	Inflammation, Chronic
Pancreas	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Unspecified	Nose	Inflammation, Chronic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_001

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Medulla	Hyperplasia, Nos
Blood vessel	Pulmonary Artery Nos	Mineralization
Brain		Malacia
		Mineralization
Eye	Crystalline Lens	Cataract
		Retinopathy
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Ovary		Cyst, Parovarian
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Hemorrhagic
Spleen	Capsule	Fibrosis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_002

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Carcinoma, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Cytoplasmic Vacuolization
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Mineralization
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematoma, Nos
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		C-Cell Carcinoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_003

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
		Hemorrhage
Lung		Cyst, Multiple
Mammary gland		Atrophy, Nos
Pancreas	Acinus	Adenoma, Nos
Pituitary gland	Anterior Pituitary	Cyst, Hemorrhagic
	Anterior Pituitary	Hematopoiesis
Spleen		Pigmentation, Nos
		Dilatation, Nos
Stomach	Fundal Gland	Hyperplasia, C Cell
Thyroid		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_004

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Eye	Crystalline Lens	Cataract Retinopathy
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos Hepatocytomegaly
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple Fibroadenoma Hyperplasia, Nos
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_005

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Dosing Accident

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Eye	Crystalline Lens	Cataract
		Retinopathy
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Mammary gland		Cyst, Multiple
Nasal cavity	Turbinates Nos	Inflammation, Chronic
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Nos
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Inflammation, Chronic
Unspecified	Adipose Tissue	Steatitis

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_006

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Eye	Nasolacrimal Duct	Hemorrhage
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage Histiocytosis
Mammary gland		Cyst, Multiple Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Salivary gland		Inflammation, Chronic
Skin	Lip Nos	Basal-Cell Tumor
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_007

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Pheochromocytoma
Clitoral gland		Inflammation, Chronic
Eye	Crystalline Lens	Cataract Retinopathy
Harderian gland	Hardarian Gland	Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos Accessory Structure
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Congestion, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_008

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland  
Intestine Large  
Kidney  
Liver

Cortex Nos  
Intestinal Tract  
Tubule

Congestion, Nos  
Bezoar  
Mineralization  
Focal Cellular Change

Lung  
Ovary  
Spleen

Periportal

Granuloma, Nos  
Inflammation, Chronic  
Congestion, Nos  
Cyst, Parovarian  
Pigmentation, Nos

Stomach

Forestomach

Inflammation, Acute

Thymus

Forestomach

Ulcer, Nos

Congestion, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_009

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
		Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
Thyroid		Cystic Follicles
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_010

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Inflammation, Chronic
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Focal Cellular Change
	Periportal	Hyperplasia, Nos Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Cyst, Multiple
Ovary		Inflammation, Chronic
Pancreas	Acinus	Atrophy, Nos Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		C-Cell Adenoma Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_011

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_012

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Nos
	Cortex Nos	Pigmentation, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Leukemia, Mononuclear Cell
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_013

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach		Dilatation, Nos
Uterus	Fundal Gland	Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_014

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos Pneumonia, Interstitial Chronic
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_015

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Cyst, Multiple
		Fibroadenoma
Nasal cavity		Inflammation, Acute
Pancreas	Acinus	Atrophy, Nos
	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_016

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Kidney	Tubule	Nephropathy
	Bile Duct	Pigmentation, Nos
Liver		Hyperplasia, Nos
Lung		Histiocytosis
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Hemorrhagic
	Intermedia	Cyst, Hemorrhagic
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Tongue		Squamous Cell Papilloma
Unspecified	Perineum	Cyst, Nos
	Multiple Organs Nos	Inflammation, Chronic
Uterus		Endometrial Stromal Polyp
		Hydrometra

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_017

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Medulla	Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Eye	Crystalline Lens	Cataract
		Retinopathy
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Skin	Trunk	Keratoacanthoma
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cyst, Embryonal Duct
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_018

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Necrosis, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp
		Inflammation, Chronic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_019

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Ganglioneuroma
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Accessory Structure
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_020

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Nos
Clitoral gland		Adenoma, Nos
		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Accessory Structure
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles
		Follicular-Cell Adenoma
		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_021

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Eye	Crystalline Lens	Cataract Retinopathy
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos Hemorrhage
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_022

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Carcinoma, Nos Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Focal Cellular Change
	Periportal	Hyperplasia, Nos Inflammation, Chronic
Lung		Alveolar/Bronchiolar Adenoma
Mammary gland		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus	Endometrium	Hyperplasia, Cystic
	Cervix Uteri	Polyp, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_023

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Active Chronic
Eye	Crystalline Lens	Cataract
		Retinopathy
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Hematopoiesis
Lung		Hemorrhage
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_024

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Chronic
Eye	Crystalline Lens	Cataract
		Retinopathy
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_025

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
		Hemorrhage
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 2\_026

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
Liver		Cytoplasmic Vacuolization
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Spleen		Pigmentation, Nos
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Active Chronic
	Forestomach	Ulcer, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_027

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Alveolar/Bronchiolar Adenoma
		Congestion, Nos
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_028

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos Hyperplasia, Nos
	Periportal	Inflammation, Chronic Histiocytosis Pneumonia, Interstitial Chronic
Mammary gland		Cyst, Multiple
Nasal cavity	Turbinates Nos	Inflammation, Chronic
Pituitary gland	Anterior Pituitary Anterior Pituitary	Cyst, Nos Hyperplasia, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Zymbal gland		Carcinoma, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_029

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Adenoma, Nos Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
Liver	Tubule	Pigmentation, Nos Accessory Structure Angiectasis Focal Cellular Change Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic Congestion, Nos
Lung		Cyst, Multiple
Mammary gland		Cyst, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
	Anterior Pituitary	Atrophy, Nos
Salivary gland		Hematopoiesis
Spleen		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_030

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland		Cortical Adenoma
Clitoral gland		Carcinoma, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
Lung		Congestion, Nos
		Histiocytosis
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_031

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Carcinoma, Nos
		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Ear	Fibroma
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_032

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos Cortex Nos Medulla	Cyst, Hemorrhagic Degeneration, Lipoid Hyperplasia, Nos
Clitoral gland		Carcinoma, Nos Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule  Tubule	Mineralization Nephropathy Pigmentation, Nos
Liver	Bile Duct Periportal	Accessory Structure Focal Cellular Change Hyperplasia, Nos Inflammation, Chronic
Lung		Histiocytosis
Lymph node	Mesenteric Lymph Node	Congestion, Nos
Mammary gland		Cyst, Multiple
Ovary		Cyst, Parovarian
Pituitary gland	Anterior Pituitary Anterior Pituitary	Adenoma, Nos Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_033

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_034

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Nos Pheochromocytoma
Kidney	Tubule	Mineralization Nephropathy
Liver	Tubule	Pigmentation, Nos Angiectasis Focal Cellular Change
Lymph node	Bile Duct	Hyperplasia, Nos
Mammary gland	Periportal	Inflammation, Chronic
Pancreas	Mandibular Lymph Node	Hyperplasia, Lymphoid
Pituitary gland	Acinus	Cyst, Multiple Atrophy, Nos
Spleen	Anterior Pituitary	Adenoma, Nos Hematopoiesis
Stomach	Fundal Gland	Pigmentation, Nos Dilatation, Nos
Thyroid		Cyst, Embryonal Duct Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_035

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Medulla	Pheochromocytoma
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Nasal cavity		Inflammation, Acute
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Intermedia	Cyst, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic
	Endometrium	Inflammation, Chronic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_036

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Cyst, Multiple Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thymus		Congestion, Nos
Thyroid		Hyperplasia, C Cell Mineralization
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_037

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Carcinoma, Nos
Eye		Retinopathy
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
		Necrosis, Nos
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_038

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Nos
Heart		Inflammation, Chronic
Intestine Small	Ileum, Ileum	Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
Liver	Tubule	Pigmentation, Nos Accessory Structure Focal Cellular Change Granuloma, Nos
	Bile Duct	Hyperplasia, Nos Hyperplasia, Nos
Lung	Periportal	Inflammation, Chronic Congestion, Nos
Mammary gland		Fibroadenoma
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Thyroid		C-Cell Adenoma Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_039

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Pheochromocytoma
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
Liver	Tubule	Pigmentation, Nos Accessory Structure Focal Cellular Change
Lung	Bile Duct Periportal	Hyperplasia, Nos Inflammation, Chronic Alveolar/Bronchiolar Carcinoma
Mammary gland		Cyst, Multiple
Pituitary gland	Intermedia Anterior Pituitary	Adenoma, Nos Cyst, Multiple Hematoma, Organized
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_040

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Congestion, Nos
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Salivary gland		Atrophy, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_041

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Mammary gland		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Active Chronic
Thymus		Congestion, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_042

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
Brain		Compression, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Accessory Structure
		Cytoplasmic Vacuolization
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
		Hemorrhage
Mammary gland		Cyst, Multiple
		Fibroadenoma
Ovary		Cyst, Parovarian
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Hemorrhagic
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Perineum	Fibroma
Uterus		Endometrial Stromal Polyp
		Hematoma, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_043

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Cortical Adenoma
	Cortex Nos	Hyperplasia, Nos
	Medulla	Pheochromocytoma
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Fibroadenoma
Pituitary gland	Anterior Pituitary	Cyst, Hemorrhagic
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 2\_044

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Clitoral gland		Carcinoma, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Focal Cellular Change
	Periportal	Hyperplasia, Nos Inflammation, Chronic
Lung		Hemorrhage
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_045

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Carcinoma, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_046

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Brain		Compression, Nos
Clitoral gland		Inflammation, Chronic
Eye	Nasolacrimal Duct	Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified		Fibroma
	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 2\_047

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 188.0 MG/KG

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Granuloma, Nos
	Periportal	Hyperplasia, Nos
Lung		Inflammation, Chronic
Mammary gland		Congestion, Nos
Ovary		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Cyst, Parovarian
	Anterior Pituitary	Cyst, Nos
Spleen		Hyperplasia, Nos
		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_048

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Cytoplasmic Vacuolization
		Granuloma, Nos
	Periportal	Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cyst, Multiple
Nasal cavity		Inflammation, Chronic
Pancreas	Acinus	Atrophy, Nos
	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Acute
	Forestomach	Ulcer, Nos
Unspecified	Head	Fibrosarcoma

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 2\_049

TRT#: 2

SEX: Female

DAY ON TEST:

DOSE: 188.0 MG/KG

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Focal Cellular Change
	Periportal	Hyperplasia, Nos Inflammation, Chronic
Lung		Congestion, Nos
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cyst, Multiple
Oral mucosa	Oral Cavity	Squamous Cell Papilloma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 2\_050

**TRT#:** 2  
**DOSE:** 188.0 MG/KG

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Intestine Large	Cecum, Colon	Necrosis, Nos
Kidney	Tubule	Nephropathy Pigmentation, Nos
Liver	Bile Duct Periportal	Focal Cellular Change Hyperplasia, Nos Inflammation, Chronic
Mammary gland		Cyst, Multiple Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Stomach	Fundal Gland	Dilatation, Nos
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_101

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Hematopoiesis
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Fibroadenoma
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis Hyperplasia, Lymphoid
		Pigmentation, Nos
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_102

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Cytoplasmic Vacuolization
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_103

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Degeneration, Lipoid Pheochromocytoma
Clitoral gland		Adenoma, Nos Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule  Tubule	Mineralization Nephropathy Pigmentation, Nos
Liver	Bile Duct Periportal	Focal Cellular Change Hyperplasia, Nos Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Fibroadenoma
Pancreas	Acinus Acinus	Atrophy, Nos Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Dilatation, Nos

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_104

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hypertrophy, Focal
Esophagus		Inflammation, Acute
Heart		Inflammation, Chronic
Intestine Small	Duodenum	Bezoar
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver	Periportal	Inflammation, Chronic
Lung		Foreign Material, Nos
Nasal cavity		Foreign Material, Nos
		Hemorrhage
Spleen		Pigmentation, Nos
Stomach	Forestomach	Necrosis, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_105

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
	Medulla	Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Dilatation, Nos

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_106

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Blood vessel	Pulmonary Vein Nos	Mineralization
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_107

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Blood vessel	Pulmonary Vein Nos	Mineralization
Brain		Compression, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_108

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Pancreas	Acinus	Atrophy, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_109

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Hyperplasia, Nos
		Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_110

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland		Accessory Structure
	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Accessory Structure
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Hematoma, Organized

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_111

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Esophagus		Fibrous Histiocytoma, Metastatic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Fibrous Histiocytoma, Metastatic Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Lung		Fibrous Histiocytoma, Metastatic Hemorrhage
Mammary gland		Cyst, Multiple
Ovary		Fibrous Histiocytoma, Metastatic
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Salivary gland		Fibrous Histiocytoma, Metastatic
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Head	Fibrous Histiocytoma, Malignant
	Neck	Fibrous Histiocytoma, Metastatic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_112

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
		Neoplastic Nodule
Lung		Hemorrhage
Mammary gland		Cyst, Multiple
		Fibroadenoma
Nasal cavity		Inflammation, Chronic
Pancreas	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Intermedia	Cyst, Nos
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_113

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Natural Death

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Cytoplasmic Vacuolization Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Mammary gland		Cyst, Multiple
Nasal cavity		Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Angiectasis
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Zymbal gland		Carcinoma, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_114

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Carcinoma, Nos Inflammation, Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos Focal Cellular Change
Liver	Bile Duct Periportal	Hyperplasia, Nos Inflammation, Chronic Necrosis, Nos
Mammary gland		Cyst, Multiple Fibroadenoma
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 3\_115

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

---

**OBSERVATIONS**

Clitoral gland

Carcinoma, Nos

Heart

Inflammation, Chronic

Kidney

Tubule

Mineralization

Tubule

Pigmentation, Nos

Liver

Focal Cellular Change

Bile Duct

Hyperplasia, Nos

Periportal

Inflammation, Chronic

Lymph node

Mesenteric Lymph Node

Hyperplasia, Lymphoid

Spleen

Pigmentation, Nos

Stomach

Fundal Gland

Dilatation, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_116

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Focal Cellular Change
	Periportal	Hyperplasia, Nos Inflammation, Chronic
Mammary gland		Cyst, Multiple
Nasal cavity		Inflammation, Acute
Pituitary gland	Anterior Pituitary	Adenoma, Nos
	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_117

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Brain		Compression, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver	Bile Duct	Cytoplasmic Vacuolization
	Periportal	Hyperplasia, Nos Inflammation, Chronic
Lung		Pneumonia, Interstitial Chronic
Mammary gland		Adenocarcinoma, Nos Cyst, Multiple
Pancreas		Cystic Ducts
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thymus		Cyst, Embryonal Duct

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_118

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Adenoma, Nos Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
Pancreas	Acinus	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		C-Cell Adenoma
Uterus		Endometrial Stromal Polyp

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 3\_119

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Intestine Small  
Kidney  
Spleen

Mesentery Nos  
Tubule

Steatitis  
Mineralization  
Hematopoiesis  
Hyperplasia, Lymphoid  
Pigmentation, Nos  
Sarcoma, Nos  
Endometrial Stromal Sarcoma

Unspecified  
Uterus

Hip

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_120

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Pigmentation, Nos
Heart		Inflammation, Chronic
Kidney	Pelvis	Hyperplasia, Epithelial
	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Accessory Structure
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Nos
	Anterior Pituitary	Hyperplasia, Nos
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Sarcoma

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 3\_121

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
Spleen		Pigmentation, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_122

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Eye	Nasolacrimal Duct	Hemorrhage
Heart		Inflammation, Chronic
Intestine Small	Ileum	Inflammation, Acute
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
Lymph node	Mesenteric Lymph Node	Congestion, Nos
	Mesenteric Lymph Node	Hyperplasia, Lymphoid
Pituitary gland	Intermedia	Cyst, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_123

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Brain		Compression, Nos
Clitoral gland		Inflammation, Suppurative
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified		Steatitis

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

**ANIMAL ID:** 3\_124

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Pigmentation, Nos
Brain		Compression, Nos
Clitoral gland		Cystic Ducts
		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Cytoplasmic Vacuolization
		Focal Cellular Change
		Granuloma, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Salivary gland		Atrophy, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:55

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

**Lab:** NA

---

**ANIMAL ID:** 3\_125

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Dosing Accident

**HISTO:**

---

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
Liver		Focal Cellular Change
Lung		Congestion, Nos
		Edema, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Pigmentation, Nos

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_126

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Adenoma, Nos
		Inflammation, Active Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Nasal cavity		Inflammation, Chronic
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_127

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Nos Hyperplasia, Nos
Heart		Inflammation, Chronic
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Histiocytosis Hyperplasia, Alveolar Epithelium
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:55  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_128

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Eye		Retinopathy
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
Pituitary gland		Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Unspecified	Neck	Fibroma
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:55

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_129

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Fibroadenoma
Ovary		Cyst, Parovarian
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Tongue		Hyperplasia, Epithelial
Unspecified	Groin	Fibroma
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_130

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
		Hemorrhage
Lung		Hyperplasia, Lymphoid
Lymph node	Mandibular Lymph Node	Fibroadenoma
Mammary gland		Adenoma, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hematopoiesis
Spleen		Pigmentation, Nos
		Dilatation, Nos
Stomach	Fundal Gland	Hyperplasia, C Cell
Thyroid		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:56

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_131

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lymph node	Mandibular Lymph Node	Hyperplasia, Lymphoid
Mammary gland		Cyst, Multiple
Nasal cavity		Hemorrhage
Ovary		Cyst, Parovarian
Pancreas	Acinus	Atrophy, Nos
	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_132

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:56  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_133

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Suppurative
Eye	Nasolacrimal Duct	Hemorrhage
Heart		Inflammation, Chronic
Kidney	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
		Pneumonia, Interstitial Chronic
Pancreas	Acinus	Hyperplasia, Nos
Pituitary gland	Intermedia	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:56  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_134

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Heart		Inflammation, Chronic
Kidney		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles

**PRIMARY CAUSE OF DEATH**

-

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:56

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_135

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Hyperplasia, Nos
	Medulla	Hyperplasia, Nos
Blood vessel	Pulmonary Artery Nos	Mineralization
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Hyperplasia, Focal
	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
Lung		Histiocytosis
		Pneumonia, Interstitial Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Hyperplasia, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Uterus		Endometrial Stromal Polyp
	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_136

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Pigmentation, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Cyst, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Unspecified	Pelvis	Inflammation, Chronic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:56  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_137

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Moribund Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Accessory Structure
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_138

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Hyperplasia, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Cytoplasmic Vacuolization
	Bile Duct	Hyperplasia, Nos
		Hemorrhage
Lung		Cyst, Multiple
Mammary gland		Adenoma, Nos
Pituitary gland	Anterior Pituitary	Hematopoiesis
Spleen		Pigmentation, Nos
	Fundal Gland	Dilatation, Nos
Stomach	Forestomach	Hyperkeratosis
	Forestomach	Hyperplasia, Epithelial
	Forestomach	Inflammation, Active Chronic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_139

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Moribund Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Carcinoma, Nos
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Angiectasis
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Unspecified	Multiple Organs Nos	Leukemia, Mononuclear Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:56

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_140

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Moribund Sacrifice

HISTO:

**OBSERVATIONS**

Adrenal gland	Medulla	Hyperplasia, Nos
Brain		Compression, Nos
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
		Hematopoiesis
		Hepatocytomegaly
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Cyst, Multiple
Nasal cavity		Inflammation, Chronic
Pituitary gland	Anterior Pituitary	Adenocarcinoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Cystic Follicles
Uterus		Endometrial Stromal Polyp
		Hyperplasia, Epithelial

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_141

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos Medulla	Hyperplasia, Nos Hyperplasia, Nos
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule Tubule	Mineralization Pigmentation, Nos
Liver		Focal Cellular Change
	Periportal	Inflammation, Chronic
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary Anterior Pituitary	Cyst, Nos Hyperplasia, Nos
Spleen		Hematopoiesis Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_142

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos Focal Cellular Change Granuloma, Nos Hematopoiesis
Liver	Periportal	Inflammation, Chronic
	Mandibular Lymph Node	Hyperplasia, Lymphoid
Lymph node		Cyst, Multiple
Mammary gland		Cyst, Nos
Pituitary gland	Anterior Pituitary	Hematopoiesis
Spleen		Pigmentation, Nos
		Hyperplasia, C Cell
Thyroid		

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:56  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_143

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Adenoma, Nos Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Angiectasis Focal Cellular Change Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Hemorrhage
Mammary gland		Cyst, Multiple
Pancreas	Acinus	Atrophy, Nos
	Acinus	Focal Cellular Change
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Salivary gland		Atrophy, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		C-Cell Adenoma Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_144

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
	Cortex Nos	Hyperplasia, Nos
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:56  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_145

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization Nephropathy
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change Granuloma, Nos
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Uterus	Endometrium	Hyperplasia, Cystic

**PRIMARY CAUSE OF DEATH**

-

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

---

**ANIMAL ID:** 3\_146

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Natural Death

**HISTO:**

---

**OBSERVATIONS**

Kidney

Tubule

Mineralization

Liver

Periportal

Inflammation, Chronic

Lung

Edema, Nos

Hemorrhage

Spleen

Pigmentation, Nos

Stomach

Bezoar

Forestomach

Inflammation, Acute

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519  
**Test Type:** Long-Term  
**Route:** Gavage  
**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** 2-Mercaptobenzothiazole  
**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014  
**Time Report Requested:** 10:20:56  
**First Dose M/F:** NA / NA  
**Lab:** NA

**ANIMAL ID:** 3\_147

**TRT#:** 3  
**DOSE:** 0

**SEX:** Female  
**DISP:** Terminal Sacrifice

**DAY ON TEST:**  
**HISTO:**

**OBSERVATIONS**

Adrenal gland		Cortical Adenoma
	Cortex Nos	Hyperplasia, Nos
Brain		Compression, Nos
Clitoral gland		Adenoma, Nos
		Inflammation, Chronic
Eye	Nasolacrimal Duct	Hemorrhage
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
	Tubule	Pigmentation, Nos
Liver		Accessory Structure
		Focal Cellular Change
	Periportal	Inflammation, Chronic
Mammary gland		Cyst, Multiple
		Fibroadenoma
Pituitary gland	Anterior Pituitary	Adenoma, Nos
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: C56519

Test Type: Long-Term

Route: Gavage

Species/Strain: Rat/F344

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: 2-Mercaptobenzothiazole

CAS Number: 149-30-4

Date Report Requested: 10/26/2014

Time Report Requested: 10:20:56

First Dose M/F: NA / NA

Lab: NA

ANIMAL ID: 3\_148

TRT#: 3

SEX: Female

DAY ON TEST:

DOSE: 0

DISP: Terminal Sacrifice

HISTO:

OBSERVATIONS

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Carcinoma, Nos
Heart		Inflammation, Chronic
Intestine Small	Mesentery Nos	Steatitis
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Accessory Structure
		Focal Cellular Change
		Granuloma, Nos
	Periportal	Inflammation, Chronic
Mammary gland		Fibroadenoma
Pancreas	Acinus	Atrophy, Nos
	Acinus	Hyperplasia, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		C-Cell Adenoma
		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_149

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland		Cortical Adenoma
Clitoral gland		Inflammation, Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
	Tubule	Pigmentation, Nos
Liver		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
		Pigmentation, Nos
Pancreas	Acinus	Atrophy, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
	Anterior Pituitary	Hyperplasia, Nos
Spleen		Pigmentation, Nos
Stomach	Fundal Gland	Dilatation, Nos
Thyroid		Hyperplasia, C Cell

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** C56519

**Test Type:** Long-Term

**Route:** Gavage

**Species/Strain:** Rat/F344

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** 2-Mercaptobenzothiazole

**CAS Number:** 149-30-4

**Date Report Requested:** 10/26/2014

**Time Report Requested:** 10:20:56

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

**Lab:** NA

**ANIMAL ID:** 3\_150

**TRT#:** 3

**SEX:** Female

**DAY ON TEST:**

**DOSE:** 0

**DISP:** Terminal Sacrifice

**HISTO:**

**OBSERVATIONS**

Adrenal gland	Cortex Nos	Degeneration, Lipoid
Clitoral gland		Inflammation, Active Chronic
Heart		Inflammation, Chronic
Kidney	Tubule	Mineralization
		Nephropathy
Liver	Tubule	Pigmentation, Nos
		Accessory Structure
		Focal Cellular Change
	Bile Duct	Hyperplasia, Nos
	Periportal	Inflammation, Chronic
Lung		Congestion, Nos
Pituitary gland	Anterior Pituitary	Cyst, Multiple
Spleen		Hematopoiesis
		Pigmentation, Nos
Thyroid		Hyperplasia, C Cell
Uterus		Endometrial Stromal Polyp

PRIMARY CAUSE OF DEATH

-

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

\* PROTOCOL REQUIRED TISSUE