

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

<b>C Number:</b>	C56111B
<b>Lock Date:</b>	01/02/1996
<b>Cage Range:</b>	All
<b>Date Range:</b>	All
<b>Reasons For Removal:</b>	All
<b>Removal Date Range:</b>	All
<b>Treatment Groups:</b>	All
<b>Study Gender:</b>	Both
<b>PWG Approval Date</b>	NONE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 1	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508901

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Prostate		Inflammation	Chronic Active, Mild

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 2	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508902

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Hepatodiaphragmatic Nodule	
		Inflammation	Chronic, Minimal
[ Hepatodiaphragmatic Nodule TGLS = 1-6: Hepatodiaphragmatic Nodule ]			
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 561111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:25

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

**Lab:** BAT

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<b>ANIMAL ID:</b> 3	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508903

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Nose		Foreign Body	

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:25

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

**Lab:** BAT

**ANIMAL ID:** 4

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** UNTREATDCONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508904

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 5	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508905

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Kidney	Renal Tubule	Regeneration	Minimal
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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 6	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508906

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**MISSING**

* Mammary Gland	* Parathyroid Gland
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**OBSERVATIONS**

* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 7	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508907

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

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PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 8	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508908

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 9	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508909

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Intestine Large, Rectum		Parasite Metazoan	
* Kidney	Renal Tubule	Regeneration	Minimal

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**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 561111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 10	<b>TRT#:</b> 1	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508910

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

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**PRIMARY CAUSE OF DEATH** -

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:25

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

**Lab:** BAT

**ANIMAL ID:** 11

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508911

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:25

First Dose M/F: NA / NA

Lab: BAT

**ANIMAL ID:** 12

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508912

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- \* Adrenal Cortex
- \* Bone Marrow
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Liver
- \* Mammary Gland
- \* Preputial Gland
- \* Skin
- \* Testes
- \* Urinary Bladder

- \* Adrenal Medulla
- \* Brain
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Lung
- \* Nose
- \* Prostate
- \* Spleen
- \* Thymus

- \* Blood Vessel
- \* Epididymis
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Lymph Node, Mandibular
- \* Pancreas
- \* Salivary Glands
- \* Stomach, Forestomach
- \* Thyroid Gland

- \* Bone
- \* Esophagus
- \* Intestine Small, Duodenum
- \* Kidney
- \* Lymph Node, Mesenteric
- \* Pituitary Gland
- \* Seminal Vesicle
- \* Stomach, Glandular
- \* Trachea

**MISSING**

- \* Parathyroid Gland

**OBSERVATIONS**

- \* Heart Cardiomyopathy Chronic, Minimal

PRIMARY CAUSE OF DEATH

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 13

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508913

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal
* Lung		Inflammation	Chronic, Minimal

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 14	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508914

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

---

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 15	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508915

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

---

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 16

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508916

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Kidney	Renal Tubule	Regeneration	Minimal
* Pituitary Gland	Pars Distalis	Cyst	Minimal
* Prostate		Inflammation	Chronic Active, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 17	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508917

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

---

**MISSING**

\* Thymus

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**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 18	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508918

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

---

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal
* Pituitary Gland	Pars Distalis	Cyst	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 19	<b>TRT#:</b> 3	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508919

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

---

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:25

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

**Lab:** BAT

**ANIMAL ID:** 20

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508920

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Preputial Gland

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Intestine Large, Colon		Parasite Metazoan	
* Kidney	Renal Tubule	Regeneration	Minimal
* Liver		Inflammation	Chronic, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 21

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508921

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 22

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508922

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 23

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508923

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 24

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508924

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 25

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508925

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 26

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508926

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

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**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 27

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508927

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

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**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 28

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508928

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 29

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508929

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 30

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508930

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

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**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 31	<b>TRT#:</b> 7	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 2.5%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508931

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver	Inflammation	Chronic, Minimal
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PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 32

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508932

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 33

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508933

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

[ Hyperplasia TGLS = 1-6I: Hyperplasia, Epithelium, Squamous, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 34

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508934

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach

Epithelium

Inflammation  
Hyperplasia

Chronic, Minimal  
Squamous, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 35	<b>TRT#:</b> 7 <b>DOSE:</b> 2.5%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9508935
<b>OBSERVATIONS</b> Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Moderate
<b>PRIMARY CAUSE OF DEATH</b>	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 561111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 36

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508936

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

[ Hyperplasia TGLS = 1-12: Hyperplasia, Epithelium, Squamous, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 37	<b>TRT#:</b> 7 <b>DOSE:</b> 2.5%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9508937
<b>OBSERVATIONS</b> Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Minimal
<b>PRIMARY CAUSE OF DEATH</b>	-		

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 38

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508938

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 39

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508939

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Minimal

---

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 40

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508940

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach

Epithelium

Inflammation  
Hyperplasia

Chronic, Minimal  
Squamous, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 41

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508941

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

[ Hyperplasia TGLS = 1-12: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 42

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508042

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 561111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 43

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508943

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach

Epithelium

Epithelium

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Mild ]

Inflammation  
Hyperplasia  
Inflammation  
Ulcer

Chronic, Minimal  
Squamous, Mild  
Chronic Active, Mild  
Marked

---

**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 44

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508944

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 45	<b>TRT#:</b> 9 <b>DOSE:</b> 5.0%	<b>SEX:</b> Male <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9508945
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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

Stomach, Glandular

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**OBSERVATIONS**

Liver	Inflammation	Chronic, Minimal
Stom Gland		
Note: TGL#2-7-NCL: Glandular stomach within normal limits; No evidence of nodules histologically.		
Stomach, Forestomach	Epithelium	Hyperplasia Inflammation
		Squamous, Moderate Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6I: Hyperplasia, Epithelium, Squamous, Moderate ]

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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 561111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:25  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 46

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508946

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

Inflammation

Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

---

**ANIMAL ID:** 47

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508947

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 48

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508948

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

[ Hyperplasia TGLS = 1-12: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 561111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 49

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508949

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 50

**TRT#:** 9

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508950

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

[ Hyperplasia TGLS = 1-12: Hyperplasia, Hyperplasia, Squamous, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:26

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 51

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 10.0%

DISP: Terminal Sacrifice

HISTO: 9508951

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Bone Marrow
- \* Heart
- \* Intestine Small, Duodenum
- \* Kidney
- \* Mammary Gland
- \* Pituitary Gland
- \* Seminal Vesicle
- \* Testes
- \* Urinary Bladder

- \* Adrenal Medulla
- \* Brain
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Lung
- \* Nose
- \* Preputial Gland
- \* Skin
- \* Thymus

- \* Blood Vessel
- \* Epididymis
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Lymph Node, Mandibular
- \* Pancreas
- \* Prostate
- \* Spleen
- \* Thyroid Gland

- \* Bone
- \* Esophagus
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Lymph Node, Mesenteric
- \* Parathyroid Gland
- \* Salivary Glands
- \* Stomach, Glandular
- \* Trachea

OBSERVATIONS

- \* Liver
- \* Stomach, Forestomach

Epithelium

Inflammation  
Hyperplasia  
Inflammation

Chronic, Minimal  
Squamous, Marked  
Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia,Epithelium,Squamous,Marked ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

**ANIMAL ID:** 52

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 10.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508952

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Lymph Node, Mesenteric  
\* Pituitary Gland  
\* Seminal Vesicle  
\* Testes  
\* Urinary Bladder

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Liver  
\* Nose  
\* Preputial Gland  
\* Skin  
\* Thymus

\* Blood Vessel  
\* Epididymis  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lung  
\* Pancreas  
\* Prostate  
\* Spleen  
\* Thyroid Gland

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mandibular  
\* Parathyroid Gland  
\* Salivary Glands  
\* Stomach, Glandular  
\* Trachea

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

\* Stomach, Forestomach

Epithelium

Hyperplasia  
Inflammation

Squamous, Marked  
Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:26

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 53

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 10.0%

DISP: Terminal Sacrifice

HISTO: 9508953

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

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

OBSERVATIONS

* Epididymis		Atypia Cellular	Moderate
Note: Degenerative testicular germinal epithelial cells filling epididymal tubules.			
* Heart		Cardiomyopathy	Chronic, Minimal
* Prostate		Atrophy	Moderate
* Seminal Vesicle		Atrophy	Mild
* Skin			
Note: TGL#1-12-NCL: Histological section reveals some dried blood on the surface but no lesion involving the underlying skin. No evidence of ulcer/abscess.			
* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Marked
		Inflammation	Chronic Active, Minimal
[ Hyperplasia TGLS = 2-6: Hyperplasia, Epithelium, Squamous, Marked ]			
* Testes	Germinal Epith	Degeneration	Moderate

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 54

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 10.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508954

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Heart		Cardiomyopathy	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Marked
		Inflammation	Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 55

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 10.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508955

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Prostate		Inflammation	Chronic Active, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Marked
[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 56	<b>TRT#:</b> 11	<b>SEX:</b> Male	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 10.0%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508956

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

---

**MISSING**

\* Parathyroid Gland

---

**OBSERVATIONS**

* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Marked
	Epithelium	Inflammation	Chronic Active, Moderate
	[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]	Ulcer	Marked
* Stomach, Glandular		Mineralization	Mild

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:26

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 57

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 10.0%

DISP: Terminal Sacrifice

HISTO: 9508957

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Bone Marrow
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Lymph Node, Mandibular
- \* Pancreas
- \* Prostate
- \* Spleen
- \* Thyroid Gland

- \* Adrenal Medulla
- \* Brain
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Lymph Node, Mesenteric
- \* Parathyroid Gland
- \* Salivary Glands
- \* Stomach, Glandular
- \* Trachea

- \* Blood Vessel
- \* Epididymis
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Mammary Gland
- \* Pituitary Gland
- \* Seminal Vesicle
- \* Testes
- \* Urinary Bladder

- \* Bone
- \* Esophagus
- \* Intestine Small, Duodenum
- \* Kidney
- \* Nose
- \* Preputial Gland
- \* Skin
- \* Thymus

OBSERVATIONS

- \* Heart
- \* Liver
- \* Lung
- \* Stomach, Forestomach

- Alveolus
- Epithelium

- Cardiomyopathy
- Inflammation
- Infiltration Cellular
- Hyperplasia

- Chronic, Minimal
- Chronic, Minimal
- Histiocyte, Minimal
- Squamous, Marked

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:26

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 58

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 10.0%

DISP: Terminal Sacrifice

HISTO: 9508958

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Bone Marrow
- \* Heart
- \* Intestine Small, Duodenum
- \* Kidney
- \* Lymph Node, Mesenteric
- \* Parathyroid Gland
- \* Salivary Glands
- \* Stomach, Glandular
- \* Trachea

- \* Adrenal Medulla
- \* Brain
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Liver
- \* Mammary Gland
- \* Pituitary Gland
- \* Seminal Vesicle
- \* Testes
- \* Urinary Bladder

- \* Blood Vessel
- \* Epididymis
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Lung
- \* Nose
- \* Preputial Gland
- \* Skin
- \* Thymus

- \* Bone
- \* Esophagus
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Lymph Node, Mandibular
- \* Pancreas
- \* Prostate
- \* Spleen
- \* Thyroid Gland

OBSERVATIONS

\* Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

Inflammation

Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:26

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 59

TRT#: 11

SEX: Male

DAY ON TEST: 92

DOSE: 10.0%

DISP: Terminal Sacrifice

HISTO: 9508959

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Bone Marrow
- \* Heart
- \* Intestine Small, Ileum
- \* Liver
- \* Mammary Gland
- \* Pituitary Gland
- \* Seminal Vesicle
- \* Testes
- \* Urinary Bladder

- \* Adrenal Medulla
- \* Brain
- \* Intestine Large, Cecum
- \* Intestine Small, Jejunum
- \* Lung
- \* Nose
- \* Preputial Gland
- \* Skin
- \* Thymus

- \* Blood Vessel
- \* Epididymis
- \* Intestine Large, Colon
- \* Islets, Pancreatic
- \* Lymph Node, Mandibular
- \* Pancreas
- \* Prostate
- \* Spleen
- \* Thyroid Gland

- \* Bone
- \* Esophagus
- \* Intestine Small, Duodenum
- \* Kidney
- \* Lymph Node, Mesenteric
- \* Parathyroid Gland
- \* Salivary Glands
- \* Stomach, Glandular
- \* Trachea

OBSERVATIONS

- \* Epididymis

Note: Only one epididymis available for histological examination.

- \* Intestine Large, Rectum
- \* Stomach, Forestomach

Epithelium

Parasite Metazoan  
Hyperplasia  
Inflammation

Squamous, Marked  
Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 60

**TRT#:** 11

**SEX:** Male

**DAY ON TEST:** 92

**DOSE:** 10.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9508960

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Mammary Gland

**OBSERVATIONS**

* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Marked
[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 61	<b>TRT#:</b> 2	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508961

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

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**OBSERVATIONS**

* Liver	Inflammation	Chronic, Minimal
* Ovary	Cyst	Mild

[ Cyst TGLS = 1-10: Cyst, Mild ]

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**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 62

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** UNTREATDCONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508962

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Mammary Gland  
\* Parathyroid Gland  
\* Spleen  
\* Thyroid Gland

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Lung  
\* Nose  
\* Pituitary Gland  
\* Stomach, Forestomach  
\* Trachea

\* Blood Vessel  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lymph Node, Mandibular  
\* Ovary  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Skin  
\* Thymus  
\* Uterus

**OBSERVATIONS**

\* Liver

Inflammation

Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 63	<b>TRT#:</b> 2	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508963

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**ORGAN AND ACCOUNTABLE SITE STATUS**

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**NORMAL**

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

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**OBSERVATIONS**

* Liver	Inflammation	Chronic, Minimal
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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 64	<b>TRT#:</b> 2	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508964

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

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**OBSERVATIONS**

* Liver	Hepatodiaphragmatic Nodule Inflammation	Chronic, Minimal
---------	--------------------------------------------	------------------

[ Hepatodiaphragmatic Nodule TGLS = 1-6: Hepatodiaphragmatic Nodule ]

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**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 65

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** UNTREATDCONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508965

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Mammary Gland  
\* Parathyroid Gland  
\* Spleen  
\* Thyroid Gland

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Lung  
\* Nose  
\* Pituitary Gland  
\* Stomach, Forestomach  
\* Trachea

\* Blood Vessel  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lymph Node, Mandibular  
\* Ovary  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Skin  
\* Thymus  
\* Uterus

**OBSERVATIONS**

\* Liver

Inflammation

Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 66

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** UNTREATDCONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508966

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Mammary Gland  
\* Parathyroid Gland  
\* Spleen  
\* Thyroid Gland

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Lung  
\* Nose  
\* Pituitary Gland  
\* Stomach, Forestomach  
\* Trachea

\* Blood Vessel  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lymph Node, Mandibular  
\* Ovary  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Skin  
\* Thymus  
\* Uterus

**OBSERVATIONS**

\* Liver  
Hepatodiaphragmatic Nodule  
Inflammation

Chronic, Minimal

[ Hepatodiaphragmatic Nodule TGLS = 1-6: Hepatodiaphragmatic Nodule ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 67

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** UNTREATDCONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508967

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Mammary Gland  
\* Pituitary Gland  
\* Stomach, Forestomach  
\* Trachea

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Lung  
\* Nose  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Blood Vessel  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lymph Node, Mandibular  
\* Ovary  
\* Skin  
\* Thymus  
\* Uterus

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Spleen  
\* Thyroid Gland

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

\* Liver

Inflammation

Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

**ANIMAL ID:** 68

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** UNTREATDCONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508968

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- \* Adrenal Cortex
- \* Bone Marrow
- \* Heart
- \* Intestine Small, Duodenum
- \* Kidney
- \* Mammary Gland
- \* Pituitary Gland
- \* Stomach, Forestomach
- \* Trachea

- \* Adrenal Medulla
- \* Brain
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Lung
- \* Nose
- \* Salivary Glands
- \* Stomach, Glandular
- \* Urinary Bladder

- \* Blood Vessel
- \* Clitoral Gland
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Lymph Node, Mandibular
- \* Pancreas
- \* Skin
- \* Thymus
- \* Uterus

- \* Bone
- \* Esophagus
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Lymph Node, Mesenteric
- \* Parathyroid Gland
- \* Spleen
- \* Thyroid Gland

**OBSERVATIONS**

- \* Liver  
  - [ Hepatodiaphragmatic Nodule TGLS = 2-6: Hepatodiaphragmatic Nodule ]
- \* Ovary  
  - [ Cyst TGLS = 1-10: Cyst, Mild ]

- Hepatodiaphragmatic Nodule  
Inflammation
- Chronic, Minimal
- Cyst
- Mild

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 69	<b>TRT#:</b> 2	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> UNTREATDCONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508969

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

---

**OBSERVATIONS**

* Heart	Cardiomyopathy	Chronic, Minimal
* Intestine Large, Rectum	Parasite Metazoan	
* Liver	Inflammation	Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH** -

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 70

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** UNTREATDCONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508970

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Liver	Inflammation	Chronic, Minimal
* Ovary	Cyst	Mild

[ Cyst TGLS = 1-10: Cyst, Mild ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

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<b>ANIMAL ID:</b> 71	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> VEHICLE CONTROL	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508971

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

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

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**OBSERVATIONS**

* Liver	Inflammation	Chronic, Minimal
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PRIMARY CAUSE OF DEATH -

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\* PROTOCOL REQUIRED TISSUE



Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:26

First Dose M/F: NA / NA

Lab: BAT

**ANIMAL ID:** 72

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508972

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

- \* Adrenal Cortex
- \* Bone Marrow
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Lymph Node, Mandibular
- \* Ovary
- \* Salivary Glands
- \* Stomach, Glandular
- \* Urinary Bladder

- \* Adrenal Medulla
- \* Brain
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Lymph Node, Mesenteric
- \* Pancreas
- \* Skin
- \* Thymus
- \* Uterus

- \* Blood Vessel
- \* Esophagus
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Mammary Gland
- \* Parathyroid Gland
- \* Spleen
- \* Thyroid Gland

- \* Bone
- \* Heart
- \* Intestine Small, Duodenum
- \* Kidney
- \* Nose
- \* Pituitary Gland
- \* Stomach, Forestomach
- \* Trachea

**OBSERVATIONS**

- \* Clitoral Gland
- \* Liver
- \* Lung

Alveolus

Inflammation  
 Inflammation  
 Infiltration Cellular

Chronic Active, Minimal  
 Chronic, Minimal  
 Histiocyte, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

**ANIMAL ID:** 73

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508973

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Mammary Gland  
\* Parathyroid Gland  
\* Spleen  
\* Thyroid Gland

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Lung  
\* Nose  
\* Pituitary Gland  
\* Stomach, Forestomach  
\* Trachea

\* Blood Vessel  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lymph Node, Mandibular  
\* Ovary  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Skin  
\* Thymus  
\* Uterus

**OBSERVATIONS**

\* Liver

Inflammation

Chronic, Minimal

Note: TGL#1-11-NCL: Histological section of caudate liver lobe considered to be within normal limits.

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 74

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508974

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Parathyroid Gland

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

**ANIMAL ID:** 75

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508975

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

* Lymph Node, Mandibular	* Parathyroid Gland
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**OBSERVATIONS**

* Liver	Inflammation	Chronic, Minimal
* Ovary	Cyst	Mild

[ Cyst TGLS = 1-10: Cyst, Mild ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

**ANIMAL ID:** 76

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508976

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex  
\* Bone Marrow  
\* Heart  
\* Intestine Small, Duodenum  
\* Kidney  
\* Mammary Gland  
\* Parathyroid Gland  
\* Spleen  
\* Thyroid Gland

\* Adrenal Medulla  
\* Brain  
\* Intestine Large, Cecum  
\* Intestine Small, Ileum  
\* Lung  
\* Nose  
\* Pituitary Gland  
\* Stomach, Forestomach  
\* Trachea

\* Blood Vessel  
\* Clitoral Gland  
\* Intestine Large, Colon  
\* Intestine Small, Jejunum  
\* Lymph Node, Mandibular  
\* Ovary  
\* Salivary Glands  
\* Stomach, Glandular  
\* Urinary Bladder

\* Bone  
\* Esophagus  
\* Intestine Large, Rectum  
\* Islets, Pancreatic  
\* Lymph Node, Mesenteric  
\* Pancreas  
\* Skin  
\* Thymus  
\* Uterus

**OBSERVATIONS**

\* Liver

Inflammation

Chronic, Minimal

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 77

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508977

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Liver	Inflammation	Chronic, Minimal
* Ovary	Cyst	Mild

[ Cyst TGLS = 1-10: Cyst, Mild ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 78

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508978

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 79

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508979

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Clitoral Gland	Inflammation	Chronic Active, Minimal
* Int Lg Colon		

Note: Colon on slide #07.

**PRIMARY CAUSE OF DEATH** -

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 80

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** VEHICLE CONTROL

**DISP:** Terminal Sacrifice

**HISTO:** 9508980

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Liver		Inflammation	Chronic, Minimal
* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

---

**ANIMAL ID:** 81

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508981

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Ovary

Cyst

Moderate

[ Cyst TGLS = 1-10: Cyst, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 82

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508982

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 83	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 1.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508983

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver	Inflammation	Chronic, Minimal
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PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 84

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508984

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Ovary

Cyst

Moderate

[ Cyst TGLS = 1-10: Cyst, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 85	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 1.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508985

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver	Inflammation	Chronic, Minimal
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---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 86

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508986

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE





**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 88

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508988

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 89	<b>TRT#:</b> 6	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 92
	<b>DOSE:</b> 1.25%	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 9508989

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver	Inflammation	Chronic, Minimal
Ovary	Cyst	Mild

[ Cyst TGLS = 1-10: Cyst, Mild ]

---

PRIMARY CAUSE OF DEATH

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 90

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 1.25%

**DISP:** Terminal Sacrifice

**HISTO:** 9508990

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

Stomach, Forestomach

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 91

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508991

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 561111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 92	<b>TRT#:</b> 8 <b>DOSE:</b> 2.5%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9508992
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**OBSERVATIONS**

Liver		Inflammation	Chronic, Minimal
Ovary		Cyst	Moderate
[ Cyst TGLS = 1-10: Cyst, Moderate ]			
Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Moderate
[ Hyperplasia TGLS = 2-6: Hyperplasia, Epithelium, Squamous, Moderate ]			

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<b>PRIMARY CAUSE OF DEATH</b>	-
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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 93

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508993

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 94

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508994

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach  
[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

Inflammation  
Hyperplasia

Chronic, Minimal  
Squamous, Marked

---

**PRIMARY CAUSE OF DEATH**

-

---

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 95

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508995

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach  
[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Mild ]

Inflammation  
Hyperplasia

Chronic, Minimal  
Squamous, Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 561111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 96	<b>TRT#:</b> 8 <b>DOSE:</b> 2.5%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9508996
<b>OBSERVATIONS</b>			
Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Moderate
[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Moderate ]			
<b>PRIMARY CAUSE OF DEATH</b>			
-			

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 97

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508997

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

[ Hyperplasia TGLS = 1-11: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 98

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508998

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach  
[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

Inflammation  
Hyperplasia

Chronic, Minimal  
Squamous, Marked

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

---

**ANIMAL ID:** 99

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9508999

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 100

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 2.5%

**DISP:** Terminal Sacrifice

**HISTO:** 9509000

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 101

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509001

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach  
[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

Inflammation  
Hyperplasia

Chronic, Minimal  
Squamous, Marked

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

<b>ANIMAL ID:</b> 102	<b>TRT#:</b> 10 <b>DOSE:</b> 5.0%	<b>SEX:</b> Female <b>DISP:</b> Terminal Sacrifice	<b>DAY ON TEST:</b> 92 <b>HISTO:</b> 9508002
<b>OBSERVATIONS</b>			
Stomach, Forestomach	Epithelium	Hyperplasia Inflammation	Squamous, Marked Chronic Active, Minimal
[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]			
<b>PRIMARY CAUSE OF DEATH</b>			
-			

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 103

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509003

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

Inflammation

Chronic Active, Mild

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 104

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509004

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

Inflammation

Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

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**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 105

**TRT#:** 10  
**DOSE:** 5.0%

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

**DAY ON TEST:** 92  
**HISTO:** 9509005

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach

Epithelium

Inflammation  
Hyperplasia  
Inflammation

Chronic, Minimal  
Squamous, Marked  
Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

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**PRIMARY CAUSE OF DEATH**

-

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**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 106

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509006

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

Inflammation

Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 107

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509007

---

**OBSERVATIONS**

Liver  
Stomach, Forestomach

Epithelium

Inflammation  
Hyperplasia  
Inflammation

Chronic, Minimal  
Squamous, Marked  
Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

---

PRIMARY CAUSE OF DEATH

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

---

**ANIMAL ID:** 108

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509008

---

**OBSERVATIONS**

Liver

Inflammation

Chronic, Minimal

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 109

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509009

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Marked

Inflammation

Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

---

**ANIMAL ID:** 110

**TRT#:** 10

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 5.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509010

---

**OBSERVATIONS**

Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

Inflammation

Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Moderate ]

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 111

**TRT#:** 12  
**DOSE:** 10.0%

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

**DAY ON TEST:** 92  
**HISTO:** 9509011

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Lung	Alveolus	Infiltration Cellular	Histiocyte, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Moderate
		Inflammation	Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Moderate ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 112

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 10.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509012

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Kidney	Renal Tubule	Regeneration	Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Moderate

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Moderate ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

P14: INDIVIDUAL ANIMAL PATHOLOGY DATA

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:26

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 113

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10.0%

DISP: Terminal Sacrifice

HISTO: 9509013

ORGAN AND ACCOUNTABLE SITE STATUS

NORMAL

- \* Adrenal Cortex
- \* Bone Marrow
- \* Heart
- \* Intestine Small, Duodenum
- \* Kidney
- \* Nose
- \* Pituitary Gland
- \* Stomach, Glandular
- \* Urinary Bladder

- \* Adrenal Medulla
- \* Brain
- \* Intestine Large, Cecum
- \* Intestine Small, Ileum
- \* Lymph Node, Mandibular
- \* Ovary
- \* Salivary Glands
- \* Thymus
- \* Uterus

- \* Blood Vessel
- \* Clitoral Gland
- \* Intestine Large, Colon
- \* Intestine Small, Jejunum
- \* Lymph Node, Mesenteric
- \* Pancreas
- \* Skin
- \* Thyroid Gland

- \* Bone
- \* Esophagus
- \* Intestine Large, Rectum
- \* Islets, Pancreatic
- \* Mammary Gland
- \* Parathyroid Gland
- \* Spleen
- \* Trachea

OBSERVATIONS

- \* Liver
- \* Lung
- \* Stomach, Forestomach

Epithelium

- Inflammation
- Inflammation
- Hyperplasia
- Inflammation

- Chronic, Minimal
- Chronic, Minimal
- Squamous, Marked
- Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 114

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 10.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509014

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Moderate
[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Moderate ]			
* Thyroid Gland			
Note: Only one thyroid gland available for histological examination.			

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 56111-01

Test Type: 90-DAY

Route: DOSED FEED

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: trans-Cinnamaldehyde

CAS Number: 14371-10-9

Date Report Requested: 10/19/2014

Time Report Requested: 07:14:26

First Dose M/F: NA / NA

Lab: BAT

ANIMAL ID: 115

TRT#: 12

SEX: Female

DAY ON TEST: 92

DOSE: 10.0%

DISP: Terminal Sacrifice

HISTO: 9509015

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

\* Adrenal Cortex

\* Adrenal Medulla

\* Blood Vessel

\* Bone

\* Bone Marrow

\* Brain

\* Clitoral Gland

\* Esophagus

\* Heart

\* Intestine Large, Cecum

\* Intestine Large, Colon

\* Intestine Large, Rectum

\* Intestine Small, Duodenum

\* Intestine Small, Ileum

\* Intestine Small, Jejunum

\* Islets, Pancreatic

\* Kidney

\* Lung

\* Lymph Node, Mandibular

\* Lymph Node, Mesenteric

\* Mammary Gland

\* Nose

\* Ovary

\* Pancreas

\* Parathyroid Gland

\* Pituitary Gland

\* Salivary Glands

\* Skin

\* Spleen

\* Stomach, Glandular

\* Thymus

\* Thyroid Gland

\* Trachea

\* Urinary Bladder

\* Uterus

**OBSERVATIONS**

\* Liver

Inflammation

Chronic, Minimal

\* Stomach, Forestomach

Epithelium

Hyperplasia

Squamous, Moderate

Epithelium

Inflammation

Chronic Active, Mild

Ulcer

Marked

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Moderate ]

PRIMARY CAUSE OF DEATH

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

**ANIMAL ID:** 116

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 10.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509016

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Intestine Large, Colon		Parasite Metazoan	
* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Marked
		Inflammation	Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 117

**TRT#:** 12  
**DOSE:** 10.0%

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

**DAY ON TEST:** 92  
**HISTO:** 9509017

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

\* Liver Hepatodiaphragmatic Nodule  
[ Hepatodiaphragmatic Nodule TGLS = 1-6: Hepatodiaphragmatic Nodule ]

Lymph Node  
Note: TGL#2-11-NCL: Renal lymph nodes contain a small amount of dark pigment (probably tattoo ink). Otherwise are within normal limits histologically.

\* Stomach, Forestomach Epithelium Hyperplasia Squamous, Marked  
Inflammation Chronic Active, Moderate  
Epithelium Ulcer Marked  
[ Hyperplasia TGLS = 3-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 118

**TRT#:** 12  
**DOSE:** 10.0%

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

**DAY ON TEST:** 92  
**HISTO:** 9509018

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**MISSING**

\* Parathyroid Gland

**OBSERVATIONS**

* Liver		Inflammation	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Marked
	Epithelium	Inflammation	Chronic Active, Moderate
		Ulcer	Marked

[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 56111-01

**Test Type:** 90-DAY

**Route:** DOSED FEED

**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** trans-Cinnamaldehyde

**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014

**Time Report Requested:** 07:14:26

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

**Lab:** BAT

**ANIMAL ID:** 119

**TRT#:** 12

**SEX:** Female

**DAY ON TEST:** 92

**DOSE:** 10.0%

**DISP:** Terminal Sacrifice

**HISTO:** 9509019

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Stomach, Forestomach	Epithelium	Hyperplasia Inflammation	Squamous, Marked Chronic Active, Minimal
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[ Hyperplasia TGLS = 1-6+7: Hyperplasia, Epithelium, Squamous, Marked ]

**PRIMARY CAUSE OF DEATH**

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 56111-01  
**Test Type:** 90-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** trans-Cinnamaldehyde  
**CAS Number:** 14371-10-9

**Date Report Requested:** 10/19/2014  
**Time Report Requested:** 07:14:26  
**First Dose M/F:** NA / NA  
**Lab:** BAT

**ANIMAL ID:** 120

**TRT#:** 12  
**DOSE:** 10.0%

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

**DAY ON TEST:** 92  
**HISTO:** 9509020

**ORGAN AND ACCOUNTABLE SITE STATUS**

**NORMAL**

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

**OBSERVATIONS**

* Intestine Large, Rectum		Parasite Metazoan	
* Liver		Inflammation	Chronic, Minimal
* Lung		Inflammation	Chronic, Minimal
* Stomach, Forestomach	Epithelium	Hyperplasia	Squamous, Marked
		Inflammation	Chronic Active, Minimal

[ Hyperplasia TGLS = 1-6: Hyperplasia, Epithelium, Squamous, Marked ]

**PRIMARY CAUSE OF DEATH**

-

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

\* PROTOCOL REQUIRED TISSUE