

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

<b>C Number:</b>	C62408
<b>Lock Date:</b>	07/30/1997
<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:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 511

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73371

---

**OBSERVATIONS**

\* Kidney

Nephropathy

Minimal

Renal Tubule

Pigmentation

Minimal

\* Liver

Bile Duct

Hyperplasia

Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 512

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73372

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Nephropathy

Minimal

\* Liver

Pigmentation

Minimal

Infiltration Cellular

Mixed Cell, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 513

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73373

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Nephropathy

Minimal

Pigmentation

Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 514

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73374

---

**OBSERVATIONS**

\* Kidney

Inflammation

Chronic, Minimal

Nephropathy

Mild

Renal Tubule

Pigmentation

Minimal

\* Liver

Basophilic Focus

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 515

**TRT#:** 1

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73375

---

**OBSERVATIONS**

\* Kidney

Nephropathy

Minimal

Renal Tubule

Pigmentation

Minimal

\* Liver

Infiltration Cellular

Mixed Cell, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 516

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73376

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 517

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73377

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Nephropathy

Minimal

Renal Tubule

Pigmentation

Minimal

[ Pigmentation TGLS = 1-5 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 518

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73378

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 519

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73379

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Mild
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 520

**TRT#:** 3

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73380

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Nephropathy

Minimal

Renal Tubule

Pigmentation

Minimal

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**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 521

**TRT#:** 5  
**DOSE:** 830 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 365  
**HISTO:** 95-73381

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
	Renal Tubule	Nephropathy	Minimal
	[ Pigmentation TGLS = 1-5 ]	Pigmentation	Minimal
* Liver		Basophilic Focus	

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PRIMARY CAUSE OF DEATH

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-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 522

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73382

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Minimal
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 523

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73383

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Moderate

Nephropathy

Minimal

Renal Tubule

Pigmentation

Minimal

\* Liver

Infiltration Cellular

Mixed Cell, Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 524

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73384

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
		Nephropathy	Mild
	Renal Tubule	Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 525

**TRT#:** 5

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73385

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal

[ Pigmentation TGLS = 1-5 ]

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 526

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73386

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Moderate

Nephropathy

Minimal

Renal Tubule

Pigmentation

Mild

[ Pigmentation TGLS = 1-5 ]

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 527

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73387

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Renal Tubule

Hyaline Droplet

Mild

[ Hyaline Droplet TGLS = 1-5 ]

Nephropathy

Minimal

\* Liver

Basophilic Focus

Mixed Cell Focus

---

**PRIMARY CAUSE OF DEATH**

-

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 528

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73388

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Minimal

[ Pigmentation TGLS = 1-5 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 529

**TRT#:** 7

**SEX:** Male

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73389

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Moderate

Nephropathy

Minimal

Renal Tubule

Pigmentation

Minimal

[ Pigmentation TGLS = 1-5 ]

\* Liver

Infiltration Cellular

Mixed Cell, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 530

**TRT#:** 7  
**DOSE:** 2500 PPM

**SEX:** Male  
**DISP:** Terminal Sacrifice

**DAY ON TEST:** 365  
**HISTO:** 95-73390

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

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**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet Inflammation Nephropathy	Moderate Chronic, Minimal Mild
	Renal Tubule	Pigmentation	Minimal

[ Pigmentation TGLS = 1-5 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 531

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73391

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Pigmentation

Minimal

\* Liver

Basophilic Focus

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 532

**TRT#:** 2  
**DOSE:** 0 PPM

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

**DAY ON TEST:** 365  
**HISTO:** 95-73392

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**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

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**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Minimal
	Renal Tubule	Pigmentation	Minimal

---

**PRIMARY CAUSE OF DEATH**

-

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\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 533

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73393

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Nephropathy

Minimal

\* Liver

Pigmentation

Minimal

Basophilic Focus

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 534

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73394

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Nephropathy

Minimal

Renal Tubule

Pigmentation

Mild

\* Liver

Basophilic Focus

Bile Duct

Hyperplasia

Mild

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 535

**TRT#:** 2

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 0 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73395

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Nephropathy

Minimal

Renal Tubule

Pigmentation

Mild

\* Liver

Basophilic Focus

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

<b>ANIMAL ID:</b> 536	<b>TRT#:</b> 4	<b>SEX:</b> Female	<b>DAY ON TEST:</b> 365
	<b>DOSE:</b> 280 PPM	<b>DISP:</b> Terminal Sacrifice	<b>HISTO:</b> 95-73396
<b>OBSERVATIONS</b>			
* Kidney	Renal Tubule	Hyaline Droplet	Moderate
	Renal Tubule	Nephropathy	Minimal
	[ Pigmentation TGLS = 3-5 ]	Pigmentation	Mild
* Liver		Basophilic Focus	
<hr/>			
PRIMARY CAUSE OF DEATH	-		
<hr/>			

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 537

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73397

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 538

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73398

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Mild
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 539

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73399

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
	Renal Tubule	Pigmentation	Mild

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 540

**TRT#:** 4

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 280 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73400

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Renal Tubule

Pigmentation

Mild

\* Liver

Infiltration Cellular

Mixed Cell, Moderate

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 541

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73401

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Moderate

Nephropathy

Minimal

Renal Tubule

Pigmentation

Mild

[ Pigmentation TGLS = 2-5 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 542

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73402

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Renal Tubule

Pigmentation

Mild

[ Pigmentation TGLS = 1-5 ]

\* Liver

Basophilic Focus

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 543

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73403

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Mild

[ Pigmentation TGLS = 1-5 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 544

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73404

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Nephropathy

Minimal

Renal Tubule

Pigmentation

Minimal

[ Pigmentation TGLS = 1-5 ]

\* Liver

Basophilic Focus

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

Experiment Number: 05211-07

Test Type: CHRONIC

Species/Strain: Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

Test Compound: Emodin

CAS Number: 518-82-1

Date Report Requested: 10/23/2014

Time Report Requested: 11:00:45

First Dose M/F: NA / NA

Lab: SRI

---

**ANIMAL ID:** 545

**TRT#:** 6

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 830 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73405

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Mild

Nephropathy

Minimal

Pigmentation

Mild

[ Pigmentation TGLS = 1-5 ]

\* Liver

Infiltration Cellular

Mixed Cell, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07  
**Test Type:** CHRONIC  
**Species/Strain:** Rat/F 344/N

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**  
**Test Compound:** Emodin  
**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014  
**Time Report Requested:** 11:00:45  
**First Dose M/F:** NA / NA  
**Lab:** SRI

---

**ANIMAL ID:** 546

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73406

---

**ORGAN AND ACCOUNTABLE SITE STATUS**

---

**NORMAL**

\* Liver

---

**OBSERVATIONS**

* Kidney	Renal Tubule	Hyaline Droplet	Moderate
		Nephropathy	Minimal
	Renal Tubule	Pigmentation	Moderate

[ Pigmentation TGLS = 1-5 ]

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 547

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73407

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Moderate

Nephropathy

Minimal

Pigmentation

Moderate

[ Pigmentation TGLS = 1-5 ]

\* Liver

Basophilic Focus

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 548

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73408

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Moderate

Nephropathy

Minimal

Pigmentation

Moderate

[ Pigmentation TGLS = 1-5 ]

\* Liver

Basophilic Focus

Infiltration Cellular

Mixed Cell, Minimal

---

PRIMARY CAUSE OF DEATH

-

---

\* PROTOCOL REQUIRED TISSUE

**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 549

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73409

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Moderate

Renal Tubule

Pigmentation

Moderate

[ Pigmentation TGLS = 1-5 ]

\* Liver

Basophilic Focus

---

**PRIMARY CAUSE OF DEATH**

-

---

\* PROTOCOL REQUIRED TISSUE



**Experiment Number:** 05211-07

**Test Type:** CHRONIC

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

**P14: INDIVIDUAL ANIMAL PATHOLOGY DATA**

**Test Compound:** Emodin

**CAS Number:** 518-82-1

**Date Report Requested:** 10/23/2014

**Time Report Requested:** 11:00:45

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

**Lab:** SRI

---

**ANIMAL ID:** 550

**TRT#:** 8

**SEX:** Female

**DAY ON TEST:** 365

**DOSE:** 2500 PPM

**DISP:** Terminal Sacrifice

**HISTO:** 95-73410

---

**OBSERVATIONS**

\* Kidney

Renal Tubule

Hyaline Droplet

Moderate

Nephropathy

Minimal

Renal Tubule

Pigmentation

Moderate

[ Pigmentation TGLS = 1-5 ]

\* Liver

Basophilic Focus

---

**PRIMARY CAUSE OF DEATH**

-

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

\* PROTOCOL REQUIRED TISSUE