Experiment Number: 99007-01
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:36
First Dose M/F: NA / NA
Lab: MBA

C Number: C99007
Lock Date: 10/11/2001
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Both
PWG Approval Date: NONE
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|            | 1  | 2  | 3  | 4  | 5  |

*TOTALS*

### Alimentary System
- Liver: + + + + + 5

### Cardiovascular System
- NONE

### Endocrine System
- NONE

### General Body System
- NONE

### Genital System
- NONE

### Hematopoietic System
- NONE

### Integumentary System
- NONE

### Musculoskeletal System
- NONE

### Nervous System
- NONE

* .Total animals with tissue examined microscopically; Total animals with tumor
+ .Tissue examined microscopically
A .Autolysis precludes evaluation
X .Lesion present
I .Insufficient tissue
M .Missing tissue
BLANK .Not examined microscopically
Experiment Number: 99007-01
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Date Report Requested: 10/21/2014
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Lab: MBA

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*TOTALS

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

SYSTEMIC LESIONS

| Multiple Organ | + | + | + | + | + | 5 |

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue
M ..Missing tissue
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**Experiment Number:** 99007-01  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N  

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*..Total animals with tissue examined microscopically; Total animals with tumor  
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BLANK..Not examined microscopically
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**Respiratory System**
NONE

**Special Senses System**
NONE

**Urinary System**
NONE

**SYSTEMIC LESIONS**

| Multiple Organ | 0 |

---

* ..Total animals with tissue examined microscopically; Total animals with tumor
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Experiment Number: 99007-01
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P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:36
First Dose M/F: NA / NA
Lab: MBA

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*TOTALS*

Alimentary System

Liver

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
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### Experiment Number: 99007-01
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- **Route:** DOSED FEED
- **Species/Strain:** Rat/F 344/N

**Test Compound:** Goldenseal root powder  
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**First Dose M/F:** NA / NA  
**Lab:** MBA

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**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

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**F 344/N Rat Male**  
**3121 PPM**

**ANIMAL ID**  
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**Experiment Number:** 99007-01  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N  

---

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT  

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 18:15:36  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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Day on Test

**F 344/N Rat Male**

**6250 PPM**

| Day of Test | Animal ID | *TOTALS*
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* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue
M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically
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X ..Lesion present
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P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

DAY ON TEST

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F 344/N Rat Male
12500 PPM

*TOTALS

**Alimentary System**

- Liver
  - + + + + 5

**Cardiovascular System**

- NONE

**Endocrine System**

- NONE

**General Body System**

- NONE

**Genital System**

- NONE

**Hematopoietic System**

- NONE

**Integumentary System**

- NONE

**Musculoskeletal System**

- NONE

**Nervous System**

- NONE

*..Total animals with tissue examined microscopically; Total animals with tumor
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Page 10
**DAY ON TEST**

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*TOTALS*

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**SYSTEMIC LESIONS**

Multiple Organ

+ + + + + 5

---

*Total animals with tissue examined microscopically; Total animals with tumor
+ Tissue examined microscopically
A Autolysis precludes evaluation
BLANK Not examined microscopically
M Missing tissue
I Insufficient tissue
Experiment Number: 99007-01
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:36
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST

F 344/N Rat Male
25000 PPM

ANIMAL ID

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*TOTALS

Alimentary System

Liver

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

NONE

Musculoskeletal System

NONE

Nervous System

NONE

* ...Total animals with tissue examined microscopically; Total animals with tumor
+ ...Tissue examined microscopically
X ...Lesion present
I ...Insufficient tissue
M ...Missing tissue
A ...Autolysis precludes evaluation
BLANK ...Not examined microscopically
Experiment Number: 99007-01
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:36
First Dose M/F: NA / NA
Lab: MBA

F 344/N Rat Male
25000   PPM

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*TOTALS

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

SYSTEMIC LESIONS

Multiple Organ
+  +  +  +  +
5

*  ..Total animals with tissue examined microscopically; Total animals with tumor
   M  ..Missing tissue
   +  ..Tissue examined microscopically
   A  ..Autolysis precludes evaluation
   X  ..Lesion present
   BLANK  ..Not examined microscopically
   I  ..Insufficient tissue
Experiment Number: 99007-01
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:36
First Dose M/F: NA / NA
Lab: MBA

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**F 344/N Rat Male**
50000 PPM

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**Alimentary System**

| Liver | + | + | + | + | + | 5 |

**Cardiovascular System**
NONE

**Endocrine System**
NONE

**General Body System**
NONE

**Genital System**
NONE

**Hematopoietic System**
NONE

**Integumentary System**
NONE

**Musculoskeletal System**
NONE

**Nervous System**
NONE

---

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue
M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically
Experiment Number: 99007-01
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:36
First Dose M/F: NA / NA
Lab: MBA

**TOTALS**

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

SYSTEMIC LESIONS
Multiple Organ + + + + +

***END OF MALE DATA***
**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT

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**Alimentary System**

- **Liver**: + + + + + 5

**Cardiovascular System**

- NONE

**Endocrine System**

- NONE

**General Body System**

- NONE

**Genital System**

- NONE

**Hematopoietic System**

- NONE

**Integumentary System**

- NONE

**Musculoskeletal System**

- NONE

**Nervous System**

- NONE

---

* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically  
I ..Insufficient tissue  
M ..Missing tissue
Experiment Number: 99007-01
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:36
First Dose M/F: NA / NA
Lab: MBA

F 344/N Rat Female
VEHICLE CONTROL

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*TOTALS

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

SYSTEMIC LESIONS

Multiple Organ + + + + + 5

* ..Total animals with tissue examined microscopically; Total animals with tumor
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M ..Missing tissue
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Experiment Number: 99007-01
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014
Time Report Requested: 18:15:36
First Dose M/F: NA / NA
Lab: MBA

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

F 344/N Rat Female
1560 PPM

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* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue
M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically
**Experiment Number:** 99007-01  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT

**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 18:15:36  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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**Respiratory System**

NONE

---

**Special Senses System**

NONE

---

**Urinary System**

NONE

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**SYSTEMIC LESIONS**

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* ..Total animals with tissue examined microscopically; Total animals with tumor

+ ..Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

M ..Missing tissue

A ..Autolysis precludes evaluation

BLANK ..Not examined microscopically

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Page 19
### P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT

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*..Total animals with tissue examined microscopically; Total animals with tumor
+..Tissue examined microscopically
X..Lesion present
I..Insufficient tissue

**M**..Missing tissue
**A**..Autolysis precludes evaluation
**BLANK**..Not examined microscopically

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**Experiment Number:** 99007-01  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Rat/F 344/N  
**Date Report Requested:** 10/21/2014  
**Time Report Requested:** 18:15:36  
**First Dose M/F:** NA / NA  
**Lab:** MBA
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X..Lesion present
I..Insufficient tissue
M..Missing tissue
A..Autolysis precludes evaluation
BLANK..Not examined microscopically
F 344/N Rat Female
6250 PPM

ANIMAL ID

*TOTALS

Alimentary System
NONE
Cardiovascular System
NONE
Endocrine System
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General Body System
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Genital System
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Hematopoietic System
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Integumentary System
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Musculoskeletal System
NONE
Nervous System
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* Total animals with tissue examined microscopically; Total animals with tumor
+ Tissue examined microscopically
X Lesion present
I Insufficient tissue
M Missing tissue
A Autolysis precludes evaluation
BLANK Not examined microscopically
**DAYS ON TEST**

**F 344/N Rat Female**

**6250 PPM**

**ANIMAL ID**

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**SYSTEMIC LESIONS**

| Multiple Organ | 0 |

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+ ..Tissue examined microscopically
X ..Lesion present
I ..Insufficient tissue

M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically
**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT

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**F 344/N Rat Female**  
**12500 PPM**

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* ..Total animals with tissue examined microscopically; Total animals with tumor  
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X ..Lesion present  
I ..Insufficient tissue  
M ..Missing tissue  
A ..Autolysis precludes evaluation  
BLANK ..Not examined microscopically
P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

F 344/N Rat Female
12500  PPM

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

SYSTEMIC LESIONS

Multiple Organ  +  +  +  +  +  5

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
A ..Autolysis precludes evaluation
I ..Insufficient tissue
X ..Lesion present
M ..Missing tissue
BLANK ..Not examined microscopically
Experiment Number: 99007-01  
Test Type: 14-DAY  
Route: DOSED FEED  
Species/Strain: Rat/F 344/N

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Test Compound: Goldenseal root powder  
CAS Number: GOLDENSEALRT

Date Report Requested: 10/21/2014  
Time Report Requested: 18:15:36  
First Dose M/F: NA / NA  
Lab: MBA

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*TOTALS  

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<td>Liver</td>
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<tr>
<td>Cardiovascular System</td>
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<td>Endocrine System</td>
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<td>General Body System</td>
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<td>Nervous System</td>
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* ..Total animals with tissue examined microscopically; Total animals with tumor  
+ ..Tissue examined microscopically  
A ..Autolysis precludes evaluation  
M ..Missing tissue  
X ..Lesion present  
I ..Insufficient tissue  
BLANK ..Not examined microscopically

Page 26
Experiment Number: 99007-01
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Rat/F 344/N

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)
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F 344/N Rat Female
25000 PPM

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*TOTALS

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

SYSTEMIC LESIONS

Multiple Organ + + + + + 5

* ..Total animals with tissue examined microscopically; Total animals with tumor
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Page 27
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Species/Strain: Rat/F 344/N

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F 344/N Rat Female
50000 PPM

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Alimentary System
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Cardiovascular System
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Page 28
**P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)**

**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT

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**Respiratory System**

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**Special Senses System**

NONE

**Urinary System**

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**SYSTEMIC LESIONS**

Multiple Organ: + + + + + 5

**END OF REPORT**

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