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<th>Experiment Number: 99007-02</th>
<th>Test Type: 14-DAY</th>
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<tbody>
<tr>
<td>Route: DOSED FEED</td>
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<tr>
<td>Species/Strain: Mouse/B6C3F1</td>
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<th>P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL</th>
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<tbody>
<tr>
<td>Test Compound: Goldenseal root powder</td>
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<tr>
<td>CAS Number: GOLDENSEALRT</td>
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<table>
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<tr>
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<td>First Dose M/F: NA / NA</td>
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**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1  
**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT  
**Date Report Requested:** 10/16/2014  
**Time Report Requested:** 02:32:47  
**First Dose M/F:** NA / NA  
**Lab:** MBA

### Alimentary System

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*TOTALS*  

#### 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 lesion and mean severity grade  
+ ..Tissue examined microscopically  
M ..Missing tissue  
1-4 ..Lesion qualified as:  
1) Minimal 2) Mild 3) Moderate 4) Marked  
X ..Lesion present  
A ..Autolysis precludes evaluation  
I ..Insufficient tissue  
BLANK ..Not examined microscopically
**Experiment Number:** 99007-02  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1  

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**Date Report Requested:** 10/16/2014  
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**First Dose M/F:** NA / NA  
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### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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**B6C3F1 Mouse Male**  
**VEHICLE CONTROL**

| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 4 | 5 |

**Respiratory System**

NONE

---

**Special Senses System**

NONE

---

**Urinary System**

NONE

---

*..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

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2) Mild   4) Marked
**Experiment Number:** 99007-02  
**Test Type:** 14-DAY  
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**Species/Strain:** Mouse/B6C3F1

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**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

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

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**Date Report Requested:** 10/16/2014  
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**First Dose M/F:** NA / NA  
**Lab:** MBA

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### DAY ON TEST

**B6C3F1 Mouse Male**  
**1560 PPM**

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<td>Musculoskeletal System</td>
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<td>Nervous System</td>
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1-4...Lesion qualified as:  
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2) Mild  
3) Moderate  
4) Marked
## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

### DAY ON TEST

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<tr>
<th>DAY ON TEST</th>
<th>B6C3F1 Mouse Male</th>
<th>1560 PPM</th>
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### Respiratory System

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### Special Senses System

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### Urinary System

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B6C3F1 Mouse Male
3121 PPM

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*TOTALS

**Alimentary System**

NONE

**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 lesion and mean severity grade
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X..Lesion present
I..Insufficient tissue
M..Missing tissue
A..Autolysis precludes evaluation
BLANK..Not examined microscopically

1-4..Lesion qualified as:
1) Minimal 3) Moderate
2) Mild 4) Marked
Experiment Number: 99007-02
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014
Time Report Requested: 02:32:47
First Dose M/F: NA / NA
Lab: MBA

---

DAN ON TEST

B6C3F1 Mouse Male
3121 PPM

ANIMAL ID

*TOTALS

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014
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First Dose M/F: NA / NA
Lab: MBA

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**B6C3F1 Mouse Male**

**6250 PPM**

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**Alimentary System**
NONE

**Cardiovascular System**
NONE

**Endocrine System**
NONE

**General Body System**
NONE

**Genital System**
NONE

**Hematopoietic System**
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**Integumentary System**
NONE

**Musculoskeletal System**
NONE

**Nervous System**

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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X ..Lesion present
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I ..Insufficient tissue
BLANK ..Not examined microscopically
1-4 ..Lesion qualified as:
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2) Mild
3) Moderate
4) Marked
**Experiment Number:** 99007-02  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1  

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

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* **TOTALS**

### Respiratory System
- NONE

### Special Senses System
- NONE

### Urinary System
- NONE

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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  X ..Lesion present
  I ..Insufficient tissue
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  A ..Autolysis precludes evaluation
  BLANK ..Not examined microscopically
  1-4 ..Lesion qualified as:
  1) Minimal
  3) Moderate
  2) Mild
  4) Marked
DAY ON TEST

B6C3F1 Mouse Male
12500 PPM

ANIMAL ID

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BLANK ..Not examined microscopically

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2) Mild      4) Marked
**DAY ON TEST**

**B6C3F1 Mouse Male**

12500  PPM

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<td><strong>Urinary System</strong></td>
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B6C3F1 Mouse Male
25000 PPM

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 lesion and mean severity grade
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M ..Missing tissue
A ..Autolysis precludes evaluation
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2) Mild
3) Moderate
4) Marked
Experiment Number: 99007-02
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014
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Lab: MBA

B6C3F1 Mouse Male
25000 PPM

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*TOTALS

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

*..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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M..Missing tissue
1-4..Lesion qualified as:
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1) Minimal 3) Moderate
..Insufficient tissue
2) Mild 4) Marked
BLANK..Not examined microscopically
**Experiment Number:** 99007-02  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1

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### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

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

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**Date Report Requested:** 10/16/2014  
**Time Report Requested:** 02:32:47  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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**B6C3F1 Mouse Male**  
**50000 PPM**

**ANIMAL ID**

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*TOTALS*

---

### Alimentary System

- **Liver**
  - **Centrilobular, Hepatocyte, Hypertrophy**
    - + + + + + 5
  - **Hepatocyte, Necrosis, Focal**
    - 1 1 1 1 1 5 1.0

### Cardiovascular System

NONE

### Endocrine System

NONE

### General Body System

NONE

### Genital System

NONE

### Hematopoietic System

NONE

### Integumentary System

NONE

### Musculoskeletal System

NONE

---

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
+ ..Tissue examined microscopically  
M ..Missing tissue  
1-4 ..Lesion qualified as:  
A ..Autolysis precludes evaluation  
1) Minimal  3) Moderate  
I ..Insufficient tissue  
2) Mild  4) Marked  
BLANK ..Not examined microscopically

---

Page 14
Experiment Number: 99007-02
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014
Time Report Requested: 02:32:47
First Dose M/F: NA / NA
Lab: MBA

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*TOTALS*

Nervous System
NONE

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

***END OF MALE DATA***

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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2) Mild
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4) Marked
Experiment Number: 99007-02
Test Type: 14-DAY
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Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014
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First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST
B6C3F1 Mouse Female
VEHICLE CONTROL

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*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 lesion and mean severity grade
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1-4 ..Lesion qualified as:
1) Minimal 2) Mild 3) Moderate 4) Marked
Experiment Number: 99007-02
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014
Time Report Requested: 02:32:47
First Dose M/F: NA / NA
Lab: MBA

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*TOTALS

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
+ ..Tissue examined microscopically
M ..Missing tissue
X ..Lesion present
A ..Autolysis precludes evaluation
I ..Insufficient tissue
BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:
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2) Mild
3) Moderate
4) Marked
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Experiment Number: 99007-02
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Mouse/B6C3F1

Date Report Requested: 10/16/2014
Time Report Requested: 02:32:47
First Dose M/F: NA / NA
Lab: MBA

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

D A Y  O N  T E S T
B6C3F1 Mouse Female
1560 PPM

ANIMAL ID

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

* TOTALS

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* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
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I ..Insufficient tissue
M ..Missing tissue
A ..Autolysis precludes evaluation
BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:
   1) Minimal
   2) Mild
   3) Moderate
   4) Marked

Page 19
**Experiment Number:** 99007-02  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1  

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

**Date Report Requested:** 10/16/2014  
**Time Report Requested:** 02:32:47  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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**DAYS ON TEST**

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I ..Insufficient tissue  
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1-4 ..Lesion qualified as:  
1) Minimal  3) Moderate  
2) Mild  4) Marked

Page 20
Experiment Number: 99007-02
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014
Time Report Requested: 02:32:47
First Dose M/F: NA / NA
Lab: MBA

DAY ON TEST
B6C3F1 Mouse Female
3121 PPM

ANIMAL ID

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

*TOTALS

Respiratory System
NONE

*..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade
M ..Missing tissue
A ..Autolysis precludes evaluation
1-4 ..Lesion qualified as:
1) Minimal  3) Moderate
2) Mild  4) Marked

Special Senses System
NONE

Urinary System
NONE

NON

Urinary System
NONE

Page 21
### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Experiment Number:** 99007-02  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1  
**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT  
**Date Report Requested:** 10/16/2014  
**Time Report Requested:** 02:32:47  
**First Dose M/F:** NA / NA  
**Lab:** MBA

#### DAY ON TEST

**B6C3F1 Mouse Female**  
**6250 PPM**

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* ..Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade  
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1-4 ..Lesion qualified as:  
1) Minimal  3) Moderate  
2) Mild  4) Marked
Experiment Number: 99007-02
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Mouse/B6C3F1

Date Report Requested: 10/16/2014
Time Report Requested: 02:32:47
First Dose M/F: NA / NA
Lab: MBA

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

DAY ON TEST
B6C3F1 Mouse Female
6250 PPM

ANIMAL ID

*TOTALS

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

+ ..Tissue examined microscopically
A ..Autolysis precludes evaluation
M ..Missing tissue
X ..Lesion present
I ..Insufficient tissue
BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:
1) Minimal 2) Mild 3) Moderate 4) Marked
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   3) Moderate
   2) Mild
   4) Marked
Experiment Number: 99007-02  
Test Type: 14-DAY  
Route: DOSED FEED  
Species/Strain: Mouse/B6C3F1

**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**  
Test Compound: Goldenseal root powder  
CAS Number: GOLDENSEALRT

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Date Report Requested: 10/16/2014  
Time Report Requested: 02:32:47  
First Dose M/F: NA / NA  
Lab: MBA
P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

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*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 lesion and mean severity grade
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X Lesion present
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I Insufficient tissue
BLANK Not examined microscopically
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2) Mild
3) Moderate
4) Marked

Page 26
Experiment Number: 99007-02
Test Type: 14-DAY
Route: DOSED FEED
Species/Strain: Mouse/B6C3F1

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL
Test Compound: Goldenseal root powder
CAS Number: GOLDENSEALRT

Date Report Requested: 10/16/2014
Time Report Requested: 02:32:47
First Dose M/F: NA / NA
Lab: MBA

Respiratory System
NONE

Special Senses System
NONE

Urinary System
NONE

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*TOTALS

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**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

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

**Experiment Number:** 99007-02  
**Test Type:** 14-DAY  
**Route:** DOSED FEED  
**Species/Strain:** Mouse/B6C3F1  
**Date Report Requested:** 10/16/2014  
**Time Report Requested:** 02:32:47  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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**B6C3F1 Mouse Female**  
**50000 PPM**

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**Alimentary System**

- **Liver**  
  - Centrilobular, Hepatocyte, Hypertrophy

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**Cardiovascular System**

- NONE

**Endocrine System**

- NONE

**General Body System**

- NONE

**Genital System**

- NONE

**Hematopoietic System**

- NONE

**Integumentary System**

- NONE

**Musculoskeletal System**

- NONE

**Nervous System**

---

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+ ..Tissue examined microscopically  
M ..Missing tissue  
X ..Lesion present  
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<td>Moderate</td>
<td>Mild</td>
<td>Marked</td>
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**P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL**

**Test Compound:** Goldenseal root powder  
**CAS Number:** GOLDENSEALRT  
**Species/Strain:** Mouse/B6C3F1  
**Date Report Requested:** 10/16/2014  
**Time Report Requested:** 02:32:47  
**First Dose M/F:** NA / NA  
**Lab:** MBA

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**B6C3F1 Mouse Female**  
**50000 PPM**

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*TOTALS*

**Respiratory System**

NONE

**Special Senses System**

NONE

**Urinary System**

NONE

**END OF REPORT**