

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:46
First Dose M/F: NA / NA
Lab: BAT

C Number: C61994C
Lock Date: Not Entered.
Cage Range: All
Date Range: All
Reasons For Removal: All
Removal Date Range: All
Treatment Groups: All
Study Gender: Both
PWG Approval Date 04/29/1994

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DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SENCAR Mouse Male	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
VEHICLE CONTROL	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
ANIMAL ID	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4			
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	0

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin +
 Skin, SOA-No Mass +

Musculoskeletal System

NONE

Nervous System

* ..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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	DAY ON TEST	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SENCAR Mouse Male		3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
VEHICLE CONTROL		6	6	6	6	6	6	6	6	6	6	6	6	6	6	2	6	6	6	6	6	6	6	6	6	6	6	6		
	ANIMAL ID	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

NONE
Respiratory System
 NONE
Special Senses System
 NONE
Urinary System
 NONE
SYSTEMIC LESIONS
 Multiple Organ

+ +

* ..Total animals with tissue examined microscopically; Total animals with tumor
 + ..Tissue examined microscopically
 X ..Lesion present
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Lab: BAT

DAY ON TEST

SENCAR Mouse Male
VEHICLE CONTROL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin 29

Skin, SOA-No Mass 1

Musculoskeletal System

NONE

Nervous System

NONE

* ..Total animals with tissue examined microscopically; Total animals with tumor
+ ..Tissue examined microscopically
X ..Lesion present
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First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
VEHICLE CONTROL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ 30

* ..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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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Male
MNNG 100/ACETONE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 6 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 7 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 8 | 4 | | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 | | |

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|--|---|---|---|--|---|---|--|---|--|
| Skin | | + | + | + | + | + | + | + | | + | + | | | + | + | + | + | + | | + | + | | | + | | + | + | + | | + | | | | |
| Skin, SOA-Mass | | | | | | | | | | | | + | + | | | | | | | | | | | + | | | | | | | | | | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | | |
| Skin, SOA-No Mass | | | | | | | | | + | | | | | | | | | | + | | | | + | | | | + | | | | + | | + | |

Musculoskeletal System

* ..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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First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 100/ACETONE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-------------------------|----|
| Skin | 21 |
| Skin, SOA-Mass | 3 |
| Squamous Cell Papilloma | 1 |
| Skin, SOA-No Mass | 6 |

Musculoskeletal System

NONE

* ..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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Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 100/ACETONE

ANIMAL ID

*TOTALS

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

30

* ..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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CAS Number: INIT/PROM

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First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 500/ACETONE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 11 |
| Subcut Tiss, Sarcoma | 1 |
| Skin, Control | 4 |
| Skin, SOA-Mass | 12 |
| Basal Cell Adenoma | 2 |
| Squamous Cell Carcinoma | 5 |
| Squamous Cell Carcinoma, Multiple | 1 |

* ..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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First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 500/ACETONE

ANIMAL ID

***TOTALS**

| | |
|-----------------------------------|----|
| Squamous Cell Papilloma | 1 |
| Squamous Cell Papilloma, Multiple | 1 |
| Subcut Tiss, Sarcoma | 4 |
| Subcut Tiss, Sarcoma, Multiple | 1 |
| Skin, SOA-No Mass | 19 |
| Squamous Cell Carcinoma | 1 |

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

| | |
|----------------|----|
| Multiple Organ | 30 |
|----------------|----|

* ..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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| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Male | 0 | 2 | 1 | 1 | 2 | 1 | 3 | 0 | 1 | 1 | 1 | 3 | 1 | 1 | 3 | 1 | 2 | 2 | 2 | 3 | 1 | 3 | 2 | 2 | 1 | 2 | 3 | 3 | 1 | 3 | | | | |
| MNNG1000/ACETONE | 7 | 5 | 5 | 6 | 6 | 9 | 5 | 3 | 1 | 8 | 2 | 6 | 8 | 3 | 6 | 3 | 8 | 1 | 0 | 6 | 7 | 6 | 1 | 9 | 9 | 5 | 6 | 6 | 6 | 6 | | | | |
| | 9 | 0 | 5 | 8 | 8 | 7 | 6 | 7 | 4 | 4 | 2 | 2 | 1 | 1 | 2 | 1 | 9 | 1 | 3 | 3 | 5 | 3 | 7 | 2 | 7 | 9 | 4 | 4 | 9 | 4 | | | | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | | | |

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|--|---|---|---|---|---|--|--|---|---|
| Skin | | + | + | + | + | + | | + | + | + | + | | | + | + | + | | | + | + | + | + | | | + | + | | | | | + | |
| Squamous Cell Carcinoma, Multiple | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcut Tiss, Sarcoma | | | | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | |
| Skin, Control | | + | | | | | | + | | | | | | | | | | | | | | | | | + | | | + | | | | |
| Skin, SOA-Mass | | | + | | | + | + | + | | + | + | | + | + | + | | | + | + | | + | + | | + | | | + | + | | | | + |
| Squamous Cell Carcinoma | | | | | | | X | | X | X | | | | | | | | | X | X | | | | | | | | | | | | X |

* ..Total animals with tissue examined microscopically; Total animals with tumor
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 Lab: BAT

| SENCAR Mouse Male
MNNG1000/ACETONE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 2 | 1 | 1 | 2 | 1 | 3 | 0 | 1 | 1 | 1 | 3 | 1 | 1 | 3 | 1 | 2 | 2 | 2 | 3 | 1 | 3 | 2 | 2 | 1 | 2 | 3 | 3 | 1 | 3 |
| | 7 | 5 | 5 | 6 | 6 | 9 | 5 | 3 | 1 | 8 | 2 | 6 | 8 | 3 | 6 | 3 | 8 | 1 | 0 | 6 | 7 | 6 | 1 | 9 | 9 | 5 | 6 | 6 | 6 | 6 |
| | 9 | 0 | 5 | 8 | 8 | 7 | 6 | 7 | 4 | 4 | 2 | 2 | 1 | 1 | 2 | 1 | 9 | 1 | 3 | 3 | 5 | 3 | 7 | 2 | 7 | 9 | 4 | 4 | 9 | 4 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Squamous Cell Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma | | | | | | X | | | | | | X | X | | | | | X | X | | | | X | X | | | | | | |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | X | | | | | | | | | X | | | | | | | | | | | |
| Subcut Tiss, Sarcoma | | | X | | | | | | | | | | | | | | | | X | | X | | | | | | | | | |
| Subcut Tiss, Squamous Cell Carcinoma | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| Skin, SOA-No Mass | | + | | + | + | | | | + | | + | + | + | | + | | | | + | | + | + | | + | + | + | + | + | + | + |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..Total animals with tissue examined microscopically; Total animals with tumor
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Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:47
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG1000/ACETONE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 19 |
| Squamous Cell Carcinoma, Multiple | 1 |
| Subcut Tiss, Sarcoma | 1 |
| Skin, Control | 5 |
| Skin, SOA-Mass | 18 |
| Squamous Cell Carcinoma | 6 |
| Squamous Cell Carcinoma, Multiple | 2 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:47
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG1000/ACETONE

ANIMAL ID

*TOTALS

| | |
|--------------------------------------|----|
| Squamous Cell Papilloma | 6 |
| Squamous Cell Papilloma, Multiple | 2 |
| Subcut Tiss, Sarcoma | 3 |
| Subcut Tiss, Squamous Cell Carcinoma | 1 |
| Skin, SOA-No Mass | 19 |

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

| | |
|----------------|----|
| Multiple Organ | 30 |
|----------------|----|

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:47
 First Dose M/F: NA / NA
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Male
MNNG100/COMPLETE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | 3 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | |
| | | 8 | 8 | 0 | 8 | 6 | 0 | 6 | 1 | 6 | 6 | 9 | 0 | 4 | 6 | 4 | 7 | 0 | 5 | 2 | 3 | 7 | 5 | 5 | 7 | 4 | 6 | 1 | 1 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | | 8 | 6 | 3 | 8 | 1 | 6 | 2 | 4 | 3 | 3 | 6 | 3 | 1 | 6 | 5 | 4 | 3 | 2 | 7 | 7 | 4 | 9 | 9 | 3 | 5 | 4 | 6 | 4 | 6 | 4 | 6 | 4 | 4 | 2 | 9 | 9 | 9 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Skin | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin, Control | + | | + | + | + | | | + | + | + | | | + | + | + | + | + | + | + | + | | | + | + | | | + | + | + | + | + | | | | | | | | | | | |
| Skin, SOA-Mass | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Basal Cell Adenoma | | | | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | X | | X | X | | | | | | | X | X | X | X | | X | X | X | X | | | | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| Squamous Cell Carcinoma, Multiple | | X | | | X | X | X | X | X | | | | | X | | | | | | X | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:47
 First Dose M/F: NA / NA
 Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| SENCAR Mouse Male
MNNG100/COMPLETE | ANIMAL ID | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 1 | 3 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | |
| | | 8 | 8 | 0 | 8 | 6 | 0 | 6 | 1 | 6 | 6 | 9 | 0 | 4 | 6 | 4 | 7 | 0 | 5 | 2 | 3 | 7 | 5 | 5 | 7 | 4 | 6 | 1 | 1 | 5 | 5 |
| | | 8 | 6 | 3 | 8 | 1 | 6 | 2 | 4 | 3 | 3 | 6 | 3 | 1 | 6 | 5 | 4 | 3 | 2 | 7 | 7 | 4 | 9 | 9 | 3 | 5 | 4 | 6 | 4 | 2 | 9 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | |
| Squamous Cell Papilloma | | | | | | | | | | X | X | | | | | | | X | | X | | | | | X | | | | | | |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | | X | | X | | | | | | | | | | | | | | | | | | |
| Subcut Tiss, Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | X | | | | |
| Skin, SOA-No Mass | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Subcut Tiss, Sarcoma | | | | | | | | | X | | | | | | | | | | | | | | | X | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:47
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG100/COMPLETE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 5 |
| Skin, Control | 22 |
| Skin, SOA-Mass | 28 |
| Basal Cell Adenoma | 1 |
| Squamous Cell Carcinoma | 19 |
| Squamous Cell Carcinoma, Multiple | 8 |
| Squamous Cell Papilloma | 5 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:47
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG100/COMPLETE

ANIMAL ID

*TOTALS

| | |
|-----------------------------------|----|
| Squamous Cell Papilloma, Multiple | 2 |
| Subcut Tiss, Sarcoma | 1 |
| Skin, SOA-No Mass | 30 |
| Subcut Tiss, Sarcoma | 2 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:47
 First Dose M/F: NA / NA
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Male
BPO 20 COMPLETE | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 6 | 9 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | | 2 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 9 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |

Musculoskeletal System

NONE

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

+ +

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:47
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
BPO 20 COMPLETE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-------------------------|----|
| Skin | 4 |
| Skin, Control | 15 |
| Skin, SOA-Mass | 1 |
| Squamous Cell Papilloma | 1 |
| Skin, SOA-No Mass | 27 |

Musculoskeletal 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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:47
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
BPO 20 COMPLETE

ANIMAL ID

*TOTALS

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

30

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SEN CAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:47
 First Dose M/F: NA / NA
 Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SEN CAR Mouse Male | MNNG 100/BPO 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 9 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 |

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|--|---|---|---|---|---|---|--|---|--|---|---|---|--|---|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|--|---|--|---|--|---|--|--|
| Skin, Control | + | | + | + | | | | + | | + | | + | + | + | | + | + | + | + | | + | + | | + | + | | + | + | | + | | | | | | | | | |
| Skin, SOA-Mass | | | + | | + | + | | | | + | | | | + | | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | + | | |
| Keratoacanthoma | | | X | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| Squamous Cell Papilloma | | | X | | X | | | | | | | | | X | | X | | X | | X | | | | | | | | | | | | | | | | | X | | |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

| | | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-----------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| SENCAR Mouse Male
MNNG 100/BPO 20 | ANIMAL ID | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | | | | | | |
| | | 6 | 6 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 9 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 9 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 6 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | |
| | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | |
| | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X | X | | |
| Skin, SOA-No Mass | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | + | + | + | + | + | + | + | + | + | + | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 100/BPO 20

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin, Control | 15 |
| Skin, SOA-Mass | 12 |
| Keratoacanthoma | 2 |
| Squamous Cell Carcinoma | 1 |
| Squamous Cell Carcinoma, Multiple | 1 |
| Squamous Cell Papilloma | 6 |
| Squamous Cell Papilloma, Multiple | 2 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 100/BPO 20

ANIMAL ID

*TOTALS

| | |
|-------------------------------|----|
| Skin, SOA-No Mass | 29 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:48
 First Dose M/F: NA / NA
 Lab: BAT

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Male | 3 | 2 | 3 | 3 | 1 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | 3 |
| MNNG 500/BPO 20 | 4 | 8 | 6 | 6 | 8 | 6 | 2 | 0 | 1 | 6 | 6 | 6 | 6 | 1 | 2 | 6 | 6 | 6 | 2 | 6 | 6 | 6 | 5 | 6 | 0 | 6 | 6 | 6 | 6 | |
| | 1 | 6 | 2 | 2 | 9 | 2 | 5 | 7 | 7 | 2 | 2 | 2 | 0 | 8 | 3 | 3 | 3 | 0 | 3 | 3 | 4 | 9 | 4 | 3 | 4 | 8 | 8 | 4 | 4 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|------|---|--|---|--|---|---|---|---|---|--|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alimentary System | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cardiovascular System | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endocrine System | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| General Body System | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Genital System | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hematopoietic System | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Integumentary System | NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin | | | | | | + | | | | | | | | | + | | | | | | | | | | | | | | |
| Skin, Control | | + | | + | | | | | + | + | | | | + | + | + | + | + | + | + | | | | | | | + | + | |
| Skin, SOA-Mass | + | + | | + | | | + | + | + | + | | + | | + | + | + | + | + | + | + | + | + | + | + | | + | + | | + |
| Keratoacanthoma | | | | | | | | | | | | | | | X | | | | | | | | | | X | | X | | |
| Sebaceous Gl, Adenoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |
| Squamous Cell Carcinoma | | | | X | | X | X | | | X | | | | | | | | X | X | | | X | X | | X | X | | | |

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:48
 First Dose M/F: NA / NA
 Lab: BAT

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SENCAR Mouse Male | 3 | 2 | 3 | 3 | 1 | 3 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | 3 |
| MNNG 500/BPO 20 | 4 | 8 | 6 | 6 | 8 | 6 | 2 | 0 | 1 | 6 | 6 | 6 | 6 | 1 | 2 | 6 | 6 | 6 | 2 | 6 | 6 | 6 | 5 | 6 | 0 | 6 | 6 | 6 | 6 | 6 |
| | 1 | 6 | 2 | 2 | 9 | 2 | 5 | 7 | 7 | 2 | 2 | 2 | 0 | 8 | 3 | 3 | 3 | 0 | 3 | 3 | 4 | 9 | 4 | 3 | 4 | 8 | 8 | 4 | 4 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| Squamous Cell Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcut Tiss, Fibroma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcut Tiss, Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin, SOA-No Mass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 500/BPO 20

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 3 |
| Skin, Control | 14 |
| Skin, SOA-Mass | 21 |
| Keratoacanthoma | 3 |
| Sebaceous Gl, Adenoma | 1 |
| Squamous Cell Carcinoma | 9 |
| Squamous Cell Carcinoma, Multiple | 1 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 500/BPO 20

| ANIMAL ID | *TOTALS |
|-----------------------------------|---------|
| Squamous Cell Papilloma | 3 |
| Squamous Cell Papilloma, Multiple | 4 |
| Subcut Tiss, Fibroma | 1 |
| Subcut Tiss, Sarcoma | 5 |
| Skin, SOA-No Mass | 29 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:48
 First Dose M/F: NA / NA
 Lab: BAT

| SENCAR Mouse Male
MNNG1000/BPO 20 | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| ANIMAL ID | 1 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | 1 | 1 | 3 | 2 | 1 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | 3 | 1 | 1 | 3 | 1 | 1 | 3 | 1 | |
| | 5 | 6 | 6 | 6 | 4 | 5 | 5 | 6 | 8 | 9 | 6 | 6 | 2 | 0 | 6 | 6 | 1 | 2 | 4 | 0 | 0 | 1 | 4 | 2 | 1 | 1 | 6 | 7 | 1 | 1 | 1 | | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | | | |
| Squamous Cell Carcinoma, Multiple | X | | | | | | | | | | | X | | | | | | | | | | X | | | | | | | | | | | | |
| Squamous Cell Papilloma | | | X | | | | | X | | X | X | | | | X | | | | | | | | | | | | | | | | | | X | |
| Subcut Tiss, Sarcoma | | X | | | X | | | | | | | | | X | | | | | | | | | X | | | | | | | | | X | | |
| Trichoepithelioma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X | | |
| Skin, SOA-No Mass | + | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | | |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG1000/BPO 20

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 3 |
| Squamous Cell Carcinoma | 1 |
| Skin, Control | 21 |
| Skin, SOA-Mass | 27 |
| Basal Cell Adenoma | 1 |
| Squamous Cell Carcinoma | 15 |
| Squamous Cell Carcinoma, Multiple | 3 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG1000/BPO 20

| ANIMAL ID | *TOTALS |
|-------------------------------|---------|
| Squamous Cell Papilloma | 6 |
| Subcut Tiss, Sarcoma | 5 |
| Trichoepithelioma | 1 |
| Skin, SOA-No Mass | 28 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 100/TPA 5

ANIMAL ID

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG 100/TPA 5

ANIMAL ID

*TOTALS

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG1000/TPA 5

ANIMAL ID

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
MNNG1000/TPA 5

ANIMAL ID

*TOTALS

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
SENTINEL MALE

ANIMAL ID

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

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

Experiment Number: 051117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Male
SENTINEL MALE

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

END OF MALE DATA

* ..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: 051117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SEN CAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:48
First Dose M/F: NA / NA
Lab: BAT

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SEN CAR Mouse Female | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| VEHICLE CONTROL | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 6 | 6 | 0 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | |
| ANIMAL ID | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 2 | 2 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 4 | 0 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | | |

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin

+ +

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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:49
 First Dose M/F: NA / NA
 Lab: BAT

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SENCAR Mouse Female | | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| VEHICLE CONTROL | | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 6 | 6 | 0 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | ANIMAL ID | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 2 | 2 | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 6 | 3 | 3 | 4 | 0 | 4 | 4 | 4 | 4 | 4 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | |

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

+ +

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:49
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
VEHICLE CONTROL

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin

30

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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:49
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
VEHICLE CONTROL

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

30

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:49
 First Dose M/F: NA / NA
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Female | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| MNNG 100/ACETONE | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |

Alimentary System
 NONE

Cardiovascular System
 NONE

Endocrine System
 NONE

General Body System
 NONE

Genital System
 NONE

Hematopoietic System
 NONE

Integumentary System
 Skin +
 Skin, SOA-No Mass + + + + +

Musculoskeletal System
 NONE

Nervous System

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:49
First Dose M/F: NA / NA
Lab: BAT

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENAR Mouse Female
MNNG 100/ACETONE | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| ANIMAL ID | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | 0 | 0 | |

NONE
Respiratory System
 NONE
Special Senses System
 NONE
Urinary System
 NONE
SYSTEMIC LESIONS
 Multiple Organ

+ +

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:49
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 100/ACETONE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin 28

Skin, SOA-No Mass 2

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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:49
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 100/ACETONE

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ 30

* ..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: 051117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:49
 First Dose M/F: NA / NA
 Lab: BAT

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| SENCAR Mouse Female | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 0 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | | |
| MNNG 500/ACETONE | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 6 | 7 | 6 | 6 | 6 | 6 | 4 | 6 | 6 | 0 | 6 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 5 | | |
| | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 8 | 3 | 3 | 9 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 9 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | X | | X | | | | | | | | | | | | | | |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcut Tiss, Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin, SOA-No Mass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:49
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 500/ACETONE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-------------------------|----|
| Mammary Gland | 1 |
| Adenoacanthoma | 1 |
| Skin | 10 |
| Skin, Control | 3 |
| Skin, SOA-Mass | 8 |
| Keratoacanthoma | 1 |
| Squamous Cell Carcinoma | 5 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:49
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 500/ACETONE

| ANIMAL ID | *TOTALS |
|-----------------------------------|---------|
| Squamous Cell Papilloma | 1 |
| Squamous Cell Papilloma, Multiple | 1 |
| Subcut Tiss, Sarcoma | 1 |
| Skin, SOA-No Mass | 17 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 05117-06

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/18/2014

Test Type: INIT/PROMOT

Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)

Time Report Requested: 19:49:49

Route: SKIN APPLICATION

CAS Number: INIT/PROM

First Dose M/F: NA / NA

Species/Strain: Mouse/SEN CAR

Lab: BAT

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SEN CAR Mouse Female
MNNG1000/ACETONE | 2 | 1 | 2 | 1 | 1 | 3 | 2 | 3 | 3 | 3 | 1 | 3 | 2 | 3 | 3 | 2 | 1 | 1 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 2 | 3 | 3 | 3 |
| | 4 | 7 | 8 | 1 | 4 | 6 | 8 | 6 | 6 | 6 | 1 | 6 | 3 | 0 | 6 | 5 | 5 | 3 | 5 | 6 | 6 | 9 | 8 | 4 | 4 | 4 | 5 | 6 | 6 | 6 |
| | 5 | 4 | 6 | 1 | 6 | 2 | 8 | 2 | 2 | 3 | 9 | 3 | 8 | 3 | 3 | 0 | 4 | 2 | 4 | 4 | 4 | 7 | 9 | 6 | 7 | 8 | 7 | 4 | 4 | 4 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|--|---|---|---|---|---|---|---|---|---|--|--|---|---|---|---|---|---|---|---|---|--|---|
| Skin | | + | | + | | | | | + | | | | | + | | + | + | | | | + | | | + | | | | | | + |
| Skin, Control | + | | | | | | | | | | | | | + | + | | | | | | | | + | + | + | | | | | |
| Skin, SOA-Mass | + | + | + | | + | + | + | | | + | + | + | + | + | | | | | | | + | | + | + | + | + | + | + | | + |
| Squamous Cell Carcinoma | X | | | | X | | | | X | X | | | | X | X | X | | | | X | | X | X | X | X | X | X | | | |
| Squamous Cell Carcinoma, Multiple | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma | X | | X | | | | | | | | | X | | | | | | | | | | | | | | | | | | |

* ..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: 051117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:50
 First Dose M/F: NA / NA
 Lab: BAT

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SENCAR Mouse Female | 2 | 1 | 2 | 1 | 1 | 3 | 2 | 3 | 3 | 3 | 1 | 3 | 2 | 3 | 3 | 2 | 1 | 1 | 3 | 3 | 3 | 1 | 2 | 3 | 2 | 1 | 2 | 3 | 3 | |
| MNNG1000/ACETONE | 4 | 7 | 8 | 1 | 4 | 6 | 8 | 6 | 6 | 6 | 1 | 6 | 3 | 0 | 6 | 5 | 5 | 3 | 5 | 6 | 6 | 9 | 8 | 4 | 4 | 4 | 5 | 6 | 6 | |
| | 5 | 4 | 6 | 1 | 6 | 2 | 8 | 2 | 2 | 3 | 9 | 3 | 8 | 3 | 3 | 0 | 4 | 2 | 4 | 4 | 4 | 7 | 9 | 6 | 7 | 8 | 7 | 4 | 4 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X | |
| Subcut Tiss, Sarcoma | | X | | | X | | X | | | | | | | X | | | | | | | | | | | | | | | | |
| Skin, SOA-No Mass | + | | | + | | + | | + | + | | + | | + | + | + | | + | | + | + | + | + | | | + | + | | + | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | X | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG1000/ACETONE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 9 |
| Skin, Control | 6 |
| Skin, SOA-Mass | 22 |
| Squamous Cell Carcinoma | 14 |
| Squamous Cell Carcinoma, Multiple | 1 |
| Squamous Cell Papilloma | 3 |
| Squamous Cell Papilloma, Multiple | 1 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG1000/ACETONE

| ANIMAL ID | *TOTALS |
|-------------------------------|---------|
| Subcut Tiss, Sarcoma | 4 |
| Skin, SOA-No Mass | 17 |
| Squamous Cell Carcinoma | 1 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
TPA 5 COMPLETE

ANIMAL ID

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
TPA 5 COMPLETE

ANIMAL ID

*TOTALS

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

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

Experiment Number: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:50
 First Dose M/F: NA / NA
 Lab: BAT

| SENCAR Mouse Female
MNNG100/COMPLETE | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 3 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 1 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 7 | 2 | 9 | 8 | 8 | 6 | 8 | 6 | 6 | 6 | 1 | 2 | 4 | 8 | 8 | 6 | 1 | 8 | 0 | 6 | 1 | 6 | 1 | 0 | 4 | 6 | 0 | 4 | 1 |
| | 0 | 4 | 8 | 6 | 9 | 2 | 9 | 8 | 3 | 8 | 2 | 5 | 7 | 8 | 6 | 3 | 7 | 6 | 7 | 8 | 6 | 4 | 0 | 6 | 1 | 4 | 6 | 1 | 4 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|
| Basal Cell Adenoma | | | | | | | | | | | | | | | X | | | | | | | | | | | | | | | | |
| Keratoacanthoma | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| Squamous Cell Carcinoma | X | | X | X | X | | | | | X | | | X | X | X | X | X | X | | X | X | | X | X | X | | | | | X | |
| Squamous Cell Carcinoma, Multiple | | X | | | | X | X | X | | X | X | X | | | | | | | | | X | | | | | X | X | X | | | |
| Squamous Cell Papilloma | | | | | | X | | X | | | | | X | | | | | | | | | | | X | | X | | | | | |
| Squamous Cell Papilloma, Multiple | | X | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| Subcut Tiss, Sarcoma | | | | | | | | | | | | X | | | | | | | | X | | | | | | | | X | | | |
| Skin, SOA-No Mass | + | + | + | + | + | + | + | + | + | + | + | + | + | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Subcut Tiss, Lymphoma Malignant | | | | | | | | | | | | | | | | | | | | X | | | | | | | | | | | |
| Undifferentiated Cell Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary 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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:50
 First Dose M/F: NA / NA
 Lab: BAT

| | DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|---|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Female
MNNG100/COMPLETE | | 1 | 3 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 1 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 |
| | | 7 | 2 | 9 | 8 | 8 | 6 | 8 | 6 | 6 | 6 | 1 | 2 | 4 | 8 | 8 | 6 | 1 | 8 | 0 | 6 | 1 | 6 | 1 | 0 | 4 | 6 | 0 |
| | | 0 | 4 | 8 | 6 | 9 | 2 | 9 | 8 | 3 | 8 | 2 | 5 | 7 | 8 | 6 | 3 | 7 | 6 | 7 | 8 | 6 | 4 | 0 | 6 | 1 | 4 | 6 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

SYSTEMIC LESIONS

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Lymphoma Malignant Undifferentiated Cell Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG100/COMPLETE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|--|----|
| Skin | 5 |
| Subcut Tiss, Lymphoma Malignant Undifferentiated Cell Type | 1 |
| Skin, Control | 20 |
| Subcut Tiss, Lymphoma Malignant Undifferentiated Cell Type | 1 |
| Skin, SOA-Mass | 28 |
| Basal Cell Adenoma | 1 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG100/COMPLETE

| ANIMAL ID | *TOTALS |
|--|---------|
| Keratoacanthoma | 1 |
| Squamous Cell Carcinoma | 17 |
| Squamous Cell Carcinoma, Multiple | 11 |
| Squamous Cell Papilloma | 5 |
| Squamous Cell Papilloma, Multiple | 2 |
| Subcut Tiss, Sarcoma | 3 |
| Skin, SOA-No Mass | 28 |
| Subcut Tiss, Lymphoma Malignant Undifferentiated Cell Type | 1 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG100/COMPLETE

ANIMAL ID

*TOTALS

| | |
|---|---|
| Lymphoma Malignant Undifferentiated Cell Type | 1 |
|---|---|

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
BPO 20 COMPLETE

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-------------------------|----|
| Skin | 5 |
| Skin, Control | 14 |
| Skin, SOA-Mass | 1 |
| Squamous Cell Papilloma | 1 |
| Skin, SOA-No Mass | 27 |

Musculoskeletal 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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:50
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
BPO 20 COMPLETE

ANIMAL ID

*TOTALS

Nervous System

NONE

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ 30

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:50
 First Dose M/F: NA / NA
 Lab: BAT

| | DAY ON TEST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Female | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| MNNG 100/BPO 20 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 0 | |

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

Skin

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|--|---|--|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|---|
| Skin, Control | | + | + | | + | + | + | | + | | + | + | + | | + | + | + | | + | | | | | + | | | | | | | | | | | | | | | + | |
| Skin, SOA-Mass | | | | + | | | | + | | + | | | | + | | + | | | + | | + | | | | | | | | | | | | | | | | | | + | + |
| Keratoacanthoma | | | | | | | | | | X | | | | | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Carcinoma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | X |

* ..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: 051117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:51
 First Dose M/F: NA / NA
 Lab: BAT

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| SENCAR Mouse Female | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| MNNG 100/BPO 20 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | |
| | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 0 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |
| Squamous Cell Papilloma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | X | | | | | | | | | | | | | | | | | | | | |
| Skin, SOA-No Mass | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 100/BPO 20

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 2 |
| Skin, Control | 15 |
| Skin, SOA-Mass | 10 |
| Keratoacanthoma | 2 |
| Squamous Cell Carcinoma | 1 |
| Squamous Cell Carcinoma, Multiple | 1 |
| Squamous Cell Papilloma | 3 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 100/BPO 20

| ANIMAL ID | *TOTALS |
|-----------------------------------|---------|
| Squamous Cell Papilloma, Multiple | 3 |
| Skin, SOA-No Mass | 28 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 051117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:51
 First Dose M/F: NA / NA
 Lab: BAT

| DAY ON TEST | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SENCAR Mouse Female | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | |
| | 6 | 1 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 2 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 7 | 3 | 6 | 3 | 3 | 3 | 3 | 3 | 1 | 4 | 4 | 4 | 0 | 9 | 4 | 1 | 4 | 4 | 4 |
| MNNG 500/BPO 20 | ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcut Tiss, Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin, SOA-No Mass | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 500/BPO 20

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 3 |
| Skin, Control | 17 |
| Skin, SOA-Mass | 14 |
| Sarcoma | 1 |
| Squamous Cell Carcinoma | 5 |
| Squamous Cell Papilloma | 4 |
| Squamous Cell Papilloma, Multiple | 1 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 500/BPO 20

| ANIMAL ID | *TOTALS |
|-------------------------------|---------|
| Subcut Tiss, Sarcoma | 3 |
| Skin, SOA-No Mass | 28 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

* ..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: 05117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SEN CAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:51
 First Dose M/F: NA / NA
 Lab: BAT

| DAY ON TEST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|-----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SEN CAR Mouse Female | 3 | 0 | 2 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 1 | 3 | 3 | 3 | 1 | 1 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 1 | 2 |
| MNNG1000/BPO 20 | 1 | 7 | 2 | 6 | 4 | 9 | 6 | 6 | 6 | 6 | 6 | 0 | 6 | 1 | 9 | 1 | 0 | 6 | 7 | 7 | 6 | 6 | 4 | 9 | 6 | 6 | 6 | 5 | 5 |
| | 4 | 1 | 9 | 2 | 1 | 4 | 2 | 2 | 2 | 3 | 3 | 9 | 3 | 4 | 7 | 4 | 6 | 3 | 4 | 4 | 3 | 4 | 4 | 8 | 4 | 4 | 4 | 4 | 9 |
| ANIMAL ID | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------|---|---|---|---|---|---|---|---|--|--|---|---|---|---|---|---|---|--|---|---|---|---|---|--|--|--|---|---|---|---|
| Skin | | | + | | | | | + | | | | | | | | | | | | | + | + | | | | | | + | | |
| Squamous Cell Carcinoma | | | | | | | | | | | | | | | | | | | | | | X | | | | | | | | |
| Skin, Control | | + | + | + | | + | + | + | | | + | + | + | + | + | + | + | | + | + | + | | | | | | + | | | |
| Skin, SOA-Mass | + | | + | + | + | + | + | | | | + | + | | | + | + | + | | | | + | + | + | | | | | | + | + |
| Squamous Cell Carcinoma | X | | X | | X | X | | | | | X | X | | | X | | | | | | | X | | | | | | | | |
| Squamous Cell Papilloma | | | | X | X | | X | X | | | | | | | | | | | | | | X | | | | | | X | | |

* ..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: 051117-06
 Test Type: INIT/PROMOT
 Route: SKIN APPLICATION
 Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
 Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
 CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
 Time Report Requested: 19:49:51
 First Dose M/F: NA / NA
 Lab: BAT

| DAY ON TEST | ANIMAL ID | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|-----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SENCAR Mouse Female | 3 | 0 | 2 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 0 | 1 | 3 | 3 | 3 | 1 | 1 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 1 | 2 |
| MNNG1000/BPO 20 | 1 | 7 | 2 | 6 | 4 | 9 | 6 | 6 | 6 | 6 | 6 | 0 | 6 | 1 | 9 | 1 | 0 | 6 | 7 | 7 | 6 | 6 | 4 | 9 | 6 | 6 | 6 | 5 | 5 |
| | 4 | 1 | 9 | 2 | 1 | 4 | 2 | 2 | 2 | 3 | 3 | 9 | 3 | 4 | 7 | 4 | 6 | 3 | 4 | 4 | 3 | 4 | 4 | 8 | 4 | 4 | 4 | 9 | |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Squamous Cell Papilloma, Multiple | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Subcut Tiss, Sarcoma | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skin, SOA-No Mass | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |
| Musculoskeletal System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nervous System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Special Senses System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urinary System | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NONE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SYSTEMIC LESIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multiple Organ | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + | + |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG1000/BPO 20

ANIMAL ID

*TOTALS

Alimentary System

NONE

Cardiovascular System

NONE

Endocrine System

NONE

General Body System

NONE

Genital System

NONE

Hematopoietic System

NONE

Integumentary System

| | |
|-----------------------------------|----|
| Skin | 5 |
| Squamous Cell Carcinoma | 1 |
| Skin, Control | 18 |
| Skin, SOA-Mass | 17 |
| Squamous Cell Carcinoma | 8 |
| Squamous Cell Papilloma | 6 |
| Squamous Cell Papilloma, Multiple | 1 |

* ..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: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG1000/BPO 20

| ANIMAL ID | *TOTALS |
|-------------------------------|---------|
| Subcut Tiss, Sarcoma | 4 |
| Skin, SOA-No Mass | 29 |
| Musculoskeletal System | |
| NONE | |
| Nervous System | |
| NONE | |
| Respiratory System | |
| NONE | |
| Special Senses System | |
| NONE | |
| Urinary System | |
| NONE | |
| SYSTEMIC LESIONS | |
| Multiple Organ | 30 |

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 100/TPA 5

ANIMAL ID

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG 100/TPA 5

ANIMAL ID

*TOTALS

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG1000/TPA 5

ANIMAL ID

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

M ..Missing tissue
A ..Autolysis precludes evaluation
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Experiment Number: 05117-06
Test Type: INIT/PROMOT
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First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
MNNG1000/TPA 5

ANIMAL ID

*TOTALS

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

M ..Missing tissue
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Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
SENTINEL FEMALE

ANIMAL ID

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

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

Experiment Number: 05117-06
Test Type: INIT/PROMOT
Route: SKIN APPLICATION
Species/Strain: Mouse/SENCAR

P04: NEOPLASMS BY INDIVIDUAL ANIMAL
Test Compound: Init/prom comparative mouse study (DMBA/TPA/BPO/MNNG)
CAS Number: INIT/PROM

Date Report Requested: 10/18/2014
Time Report Requested: 19:49:51
First Dose M/F: NA / NA
Lab: BAT

DAY ON TEST

SENCAR Mouse Female
SENTINEL FEMALE

ANIMAL ID

*TOTALS

Respiratory System

NONE

Special Senses System

NONE

Urinary System

NONE

SYSTEMIC LESIONS

Multiple Organ

0

**** END OF REPORT ****

* ..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
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