

Experiment Number: **A09328**

Test Type: **Genetic Toxicology - Bacterial
Mutagenicity**

G06: Ames Summary Data

Test Compound: **Senna (powdered)**

CAS Number: **8013-11-4**

Date Report Requested: **09/15/2018**

Time Report Requested: **20:01:32**

NTP Study Number:

A09328

Study Result:

Negative

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G06: Ames Summary Data

Test Compound: Senna (powdered)

CAS Number: 8013-11-4

Date Report Requested: 09/15/2018

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	108 ± 3.2	168 ± 3.8	181 ± 3.5	120 ± 1.5	190 ± 17.3
100.0	110 ± 6.6 ^P	198 ± 8.7 ^P	216 ± 5.5 ^P	109 ± 2.6 ^P	173 ± 3.5 ^P
333.0	122 ± 8.2 ^P	241 ± 26.6 ^P	216 ± 8.3 ^P	114 ± 6.1 ^P	201 ± 4.1 ^P
1000.0	109 ± 0.9 ^P	201 ± 9.8 ^P	230 ± 13.0 ^P	111 ± 2.5 ^P	211 ± 35.8 ^P
3333.0	107 ± 1.5 ^P	221 ± 9.3 ^P	197 ± 11.0 ^P	129 ± 10.1 ^P	190 ± 4.1 ^P
10000.0	106 ± 1.0 ^P	192 ± 8.3 ^P	195 ± 10.0 ^P	106 ± 1.5 ^P	193 ± 2.8 ^P
Trial Summary	Negative	Equivocal	Negative	Negative	Negative
Positive Control ²					1291 ± 69.6
Positive Control ³	606 ± 3.0	511 ± 19.2			
Positive Control ⁴			915 ± 28.4		
Positive Control ⁵					
Positive Control ⁶				632 ± 14.5	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	105 ± 2.0
100.0	109 ± 3.0 ^P
333.0	116 ± 3.2 ^P
1000.0	114 ± 3.2 ^P
3333.0	115 ± 5.6 ^P
10000.0	119 ± 5.7 ^P
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	842 ± 41.5
Positive Control ⁶	

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	10 ± 4.8	12 ± 2.0	15 ± 2.6	16 ± 0.0	9 ± 1.5
100.0	17 ± 0.7 ^p	11 ± 2.7 ^p	8 ± 0.9 ^p	17 ± 1.3 ^p	11 ± 2.3 ^p
333.0	16 ± 1.0 ^p	10 ± 1.9 ^p	10 ± 1.2 ^p	17 ± 0.6 ^p	12 ± 0.3 ^p
1000.0	15 ± 0.3 ^p	12 ± 1.7 ^p	12 ± 3.2 ^p	16 ± 1.0 ^p	12 ± 2.6 ^p
3333.0	18 ± 0.9 ^p	12 ± 0.6 ^p	8 ± 0.3 ^p	16 ± 0.3 ^p	9 ± 0.3 ^p
10000.0	16 ± 0.3 ^p	14 ± 1.7 ^p	13 ± 1.5 ^p	16 ± 0.9 ^p	11 ± 1.5 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					145 ± 9.9
Positive Control ³	655 ± 26.8	244 ± 11.4			
Positive Control ⁵					
Positive Control ⁶			70 ± 2.3	79 ± 3.8	

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	13 ± 1.2
100.0	15 ± 0.9 ^p
333.0	14 ± 0.6 ^p
1000.0	16 ± 1.7 ^p
3333.0	16 ± 0.3 ^p
10000.0	17 ± 1.2 ^p
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	494 ± 61.8
Positive Control ⁶	

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	91 ± 5.5	140 ± 21.7	144 ± 15.6	108 ± 3.8	177 ± 3.2
100.0	108 ± 4.5 ^P	200 ± 1.8 ^P	164 ± 5.6 ^P	115 ± 7.2 ^P	150 ± 5.2 ^P
333.0	111 ± 2.2 ^P	198 ± 3.2 ^P	180 ± 10.1 ^P	116 ± 6.7 ^P	163 ± 4.7 ^P
1000.0	106 ± 1.0 ^P	196 ± 8.5 ^P	189 ± 4.0 ^P	105 ± 0.9 ^P	170 ± 4.0 ^P
3333.0	111 ± 3.8 ^P	189 ± 4.6 ^P	191 ± 1.5 ^P	119 ± 7.2 ^P	166 ± 2.4 ^P
10000.0	122 ± 8.4 ^P	193 ± 3.8 ^P	193 ± 5.5 ^P	114 ± 2.6 ^P	174 ± 3.8 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					1456 ± 33.0
Positive Control ⁶			1741 ± 109.0	534 ± 73.8	
Positive Control ⁷	982 ± 172.0	714 ± 79.7			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	101 ± 4.4
100.0	97 ± 4.0 ^P
333.0	101 ± 1.3 ^P
1000.0	119 ± 5.2 ^P
3333.0	121 ± 4.4 ^P
10000.0	120 ± 8.7 ^P
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	1700 ± 34.3
Positive Control ⁷	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	13 ± 0.3	13 ± 1.2	16 ± 4.2	13 ± 0.6	22 ± 2.3
100.0	13 ± 1.3 ^p	13 ± 2.0 ^p	15 ± 2.3 ^p	14 ± 2.3 ^p	18 ± 1.2 ^p
333.0	14 ± 0.3 ^p	12 ± 1.2 ^p	25 ± 3.3 ^p	13 ± 0.7 ^p	17 ± 1.5 ^p
1000.0	14 ± 0.7 ^p	17 ± 0.9 ^p	22 ± 5.1 ^p	14 ± 0.0 ^p	31 ± 3.6 ^p
3333.0	16 ± 0.9 ^p	15 ± 0.6 ^p	22 ± 1.0 ^p	18 ± 0.7 ^p	40 ± 2.4 ^p
10000.0	16 ± 1.2 ^p	16 ± 0.9 ^p	25 ± 2.4 ^p	19 ± 0.7 ^p	38 ± 7.6 ^p
Trial Summary	Negative	Negative	Negative	Negative	Equivocal
Positive Control ²			379 ± 12.2		1307 ± 60.8
Positive Control ⁸	118 ± 2.7	115 ± 6.9			
Positive Control ⁵				191 ± 13.0	

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	19 ± 2.2	11 ± 0.7
100.0	24 ± 4.9 ^p	11 ± 1.3 ^p
333.0	20 ± 6.5 ^p	16 ± 0.9 ^p
1000.0	21 ± 2.1 ^p	13 ± 0.6 ^p
3333.0	21 ± 3.4 ^p	15 ± 0.6 ^p
10000.0	28 ± 0.6 ^p	17 ± 1.0 ^p
Trial Summary	Negative	Negative
Positive Control ²	817 ± 87.2	
Positive Control ⁸		
Positive Control ⁵		906 ± 56.0

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LEGEND

Values given as Mean or Mean \pm Standard Error Mean

The number of samples = 3, unless samples marked toxic or contaminated were excluded from mean and SEM calculations

CAS Number = Chemical Abstracts Service registry number

- 1: Vehicle Control: Dimethyl Sulfoxide
- 2: 0.4 ug/Plate 2-Aminoanthracene
- 3: 0.5 ug/Plate Sodium Azide
- 4: 0.75 ug/Plate 2-Aminoanthracene
- 5: 1.0 ug/Plate 2-Aminoanthracene
- 6: 2.0 ug/Plate 2-Aminoanthracene
- 7: 24.0 ug/Plate 9-Aminoacridine
- 8: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine
- p: Precipitate

** END OF REPORT **