

Experiment Number: A42362

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Silybin

CAS Number: 22888-70-6

Date Report Requested: 09/17/2018

Time Report Requested: 00:13:47

NTP Study Number:

A42362

Study Result:

Negative

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Date Report Requested: 09/17/2018

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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	147 ± 5.1	121 ± 15.1	119 ± 5.7	140 ± 10.4	114 ± 1.7
33.0	151 ± 5.2	112 ± 9.8	127 ± 7.1	164 ± 16.2	106 ± 2.4
100.0	153 ± 2.1	99 ± 4.7	119 ± 15.6	163 ± 10.5	108 ± 5.4
333.0	173 ± 8.5	112 ± 9.5	120 ± 3.5	173 ± 9.4	135 ± 2.6
1000.0	120 ± 7.8 ^s	113 ± 6.0 ^s	134 ± 10.3 ^s	152 ± 11.5	122 ± 4.7 ^s
3333.0	71 ± 9.5 ^x	54 ± 23.1 ^x	90 ± 1.5 ^x	72 ± 2.9 ^s	52 ± 10.2 ^x
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					391 ± 35.0
Positive Control ³	357 ± 3.8	334 ± 38.5			
Positive Control ⁴			339 ± 30.2		
Positive Control ⁵					
Positive Control ⁶				377 ± 19.6	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	144 ± 4.1
33.0	148 ± 9.1
100.0	149 ± 13.3
333.0	135 ± 9.3
1000.0	134 ± 7.0
3333.0	81 ± 6.2 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	579 ± 58.9
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	13 ± 1.0	17 ± 1.2	8 ± 1.7	19 ± 0.7	10 ± 0.3
33.0	16 ± 1.8	12 ± 1.9	9 ± 1.0	16 ± 1.8	17 ± 0.3
100.0	15 ± 1.5	16 ± 1.2	9 ± 1.2	17 ± 0.7	9 ± 1.7
333.0	17 ± 0.6	11 ± 2.6	11 ± 2.3	13 ± 2.6	10 ± 3.1
1000.0	13 ± 2.2 ^s	9 ± 1.9	9 ± 1.0	15 ± 2.3 ^s	11 ± 1.5
3333.0	11 ± 2.3 ^s	1 ± 0.7 ^x	6 ± 0.9 ^x	7 ± 0.6 ^s	6 ± 0.3 ^x
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					37 ± 4.6
Positive Control ³	254 ± 13.7	114 ± 15.1			
Positive Control ⁵					
Positive Control ⁶			91 ± 14.8	79 ± 2.2	

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Date Report Requested: 09/17/2018
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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	12 ± 1.5
33.0	12 ± 1.5
100.0	11 ± 1.5
333.0	10 ± 1.2
1000.0	14 ± 1.0 ^s
3333.0	11 ± 0.9 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	153 ± 6.4
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	113 ± 5.6	123 ± 10.7	115 ± 15.9	184 ± 2.4	90 ± 11.5
33.0	111 ± 9.4	120 ± 3.2	111 ± 2.0	184 ± 12.0	93 ± 7.8
100.0	113 ± 3.2	135 ± 1.2	102 ± 6.9	171 ± 5.0	92 ± 7.5
333.0	112 ± 13.8	133 ± 6.1	123 ± 6.8	162 ± 13.9	87 ± 3.6
1000.0	140 ± 5.9 ^s	92 ± 4.9 ^s	109 ± 4.7	161 ± 5.9 ^s	116 ± 7.3
3333.0	101 ± 6.7 ^s	67 ± 11.0 ^x	57 ± 3.5 ^x	147 ± 5.8 ^s	49 ± 4.6 ^x
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					497 ± 30.1
Positive Control ⁶			492 ± 35.5	368 ± 24.1	
Positive Control ⁷	257 ± 3.8	296 ± 18.6			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	165 ± 7.5
33.0	139 ± 11.0
100.0	127 ± 12.9
333.0	136 ± 2.0
1000.0	172 ± 4.5 ^s
3333.0	144 ± 4.6 ^s
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	579 ± 10.0
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	12 ± 2.1	10 ± 1.2	11 ± 0.7	35 ± 1.7	12 ± 1.8
33.0	16 ± 1.2	10 ± 1.2	14 ± 3.1	32 ± 2.3	11 ± 3.2
100.0	14 ± 1.5	8 ± 1.2	11 ± 1.2	38 ± 1.2	7 ± 1.2
333.0	16 ± 1.2	11 ± 1.3	13 ± 0.9	41 ± 3.5	12 ± 1.5
1000.0	17 ± 4.2 ^s	10 ± 1.0 ^s	12 ± 2.1 ^s	39 ± 1.2	8 ± 1.8 ^s
2000.0					
3333.0	10 ± 1.0 ^x	2 ± 1.2 ^x	4 ± 0.6 ^x	24 ± 2.9 ^s	2 ± 0.9 ^x
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			133 ± 33.9		279 ± 10.7
Positive Control ⁵				239 ± 22.4	
Positive Control ⁸	238 ± 0.9	103 ± 9.9			

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	27 ± 1.3	15 ± 1.9
33.0	35 ± 1.9	
100.0	32 ± 2.4	13 ± 0.3
333.0	38 ± 2.7	15 ± 0.9
1000.0	43 ± 2.7	16 ± 1.2
2000.0		17 ± 2.6
3333.0	29 ± 2.3 ^s	14 ± 0.9 ^s
Trial Summary	Negative	Negative
Positive Control ²		
Positive Control ⁵	531 ± 19.2	768 ± 50.7
Positive Control ⁸		

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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
- s: Slight Toxicity
- x: Slight Toxicity and Precipitate

** END OF REPORT **