

Experiment Number: **A44499**

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

G06: Ames Summary Data

Test Compound: **Milk thistle extract**

CAS Number: **84604-20-6**

Date Report Requested: **09/17/2018**

Time Report Requested: **00:47:04**

NTP Study Number:

A44499

Study Result:

Negative

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Test Compound: Milk thistle extract

CAS Number: 84604-20-6

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	150 ± 9.6	116 ± 4.0	99 ± 5.4	159 ± 9.1	99 ± 4.3
100.0	156 ± 7.9	119 ± 3.8	99 ± 7.1	148 ± 33.5	90 ± 9.2
333.0	147 ± 15.6	131 ± 7.5	83 ± 5.4	151 ± 12.7	79 ± 9.0
1000.0	132 ± 5.1	123 ± 3.2	105 ± 7.7	156 ± 3.6	90 ± 7.7
3333.0	137 ± 9.7	109 ± 5.3	60 ± 30.2	143 ± 13.7	81 ± 3.3
10000.0	131 ± 2.0	125 ± 15.5	106 ± 19.2	137 ± 5.0	101 ± 7.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					465 ± 83.0
Positive Control ³	301 ± 0.9	303 ± 18.9			
Positive Control ⁴			419 ± 27.3		
Positive Control ⁵					
Positive Control ⁶				492 ± 65.9	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	132 ± 3.5
100.0	126 ± 6.7
333.0	122 ± 5.0
1000.0	129 ± 12.9
3333.0	118 ± 7.5
10000.0	131 ± 2.3
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	859 ± 51.5
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	16 ± 1.0	8 ± 2.4	10 ± 1.2	19 ± 1.8	10 ± 2.3
100.0	11 ± 1.7	7 ± 0.9	8 ± 1.2	13 ± 1.9	9 ± 1.9
333.0	10 ± 0.7	10 ± 2.3	12 ± 2.0	16 ± 2.0	9 ± 1.2
1000.0	13 ± 2.6	8 ± 1.5	9 ± 0.3	13 ± 0.3	6 ± 0.7
3333.0	13 ± 1.0	11 ± 0.6	9 ± 1.2	14 ± 0.7	8 ± 1.3
10000.0	9 ± 0.9	8 ± 2.6	13 ± 2.1	13 ± 2.7	5 ± 1.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					39 ± 4.8
Positive Control ³	232 ± 22.4	106 ± 8.4			
Positive Control ⁵					
Positive Control ⁶			128 ± 7.3	44 ± 7.1	

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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	15 ± 2.2
100.0	17 ± 1.9
333.0	14 ± 1.7
1000.0	18 ± 1.2
3333.0	13 ± 2.2
10000.0	13 ± 1.0
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	133 ± 37.6
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	140 ± 1.2	81 ± 5.0	118 ± 2.3	160 ± 21.6	115 ± 6.1
100.0	142 ± 9.8	83 ± 0.0	126 ± 3.2	161 ± 17.2	107 ± 10.3
333.0	128 ± 4.9	101 ± 8.2	113 ± 5.5	125 ± 2.5	130 ± 10.7
1000.0	124 ± 8.6	103 ± 10.5	115 ± 8.7	148 ± 6.6	118 ± 2.6
3333.0	122 ± 8.2	104 ± 2.7	111 ± 0.9	138 ± 10.5	124 ± 12.4
10000.0	125 ± 1.9	100 ± 12.9	108 ± 5.4	188 ± 12.9	131 ± 5.4
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					881 ± 50.9
Positive Control ⁶			621 ± 61.7	422 ± 13.3	
Positive Control ⁷	337 ± 9.1	383 ± 70.2			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	137 ± 5.2
100.0	122 ± 10.5
333.0	117 ± 9.1
1000.0	123 ± 8.8
3333.0	120 ± 4.2
10000.0	131 ± 10.0
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	1046 ± 12.5
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	20 ± 2.3	13 ± 1.7	23 ± 3.9	26 ± 3.1	23 ± 0.6
100.0	24 ± 1.5	16 ± 3.5	14 ± 0.0	22 ± 4.2	23 ± 1.2
333.0	22 ± 3.8	15 ± 2.3	13 ± 2.5	26 ± 4.4	16 ± 0.6
1000.0	22 ± 5.4	18 ± 0.7	13 ± 2.9	22 ± 2.8	20 ± 4.5
3333.0	20 ± 3.6	15 ± 2.9	11 ± 3.2	20 ± 1.7	22 ± 1.2
10000.0	22 ± 2.0	19 ± 1.8	16 ± 2.3	20 ± 4.6	21 ± 2.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			165 ± 21.8		559 ± 78.2
Positive Control ⁸	245 ± 24.4	78 ± 11.4			
Positive Control ⁵				270 ± 18.2	

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	21 ± 4.7
100.0	18 ± 3.2
333.0	18 ± 1.0
1000.0	20 ± 3.2
3333.0	20 ± 2.0
10000.0	25 ± 6.2
Trial Summary	Negative
Positive Control ²	
Positive Control ⁸	
Positive Control ⁵	580 ± 40.0

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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

**** END OF REPORT ****