

Experiment Number: A37723

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

G06: Ames Summary Data

Test Compound: **alpha-Thujone**

CAS Number: **546-80-5**

Date Report Requested: **09/16/2018**

Time Report Requested: **20:47:10**

NTP Study Number:

A37723

Study Result:

Negative

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Date Report Requested: 09/16/2018

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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	92 ± 2.0	203 ± 12.1	160 ± 31.5	103 ± 2.2	137 ± 8.1
10.0	90 ± 3.0	191 ± 6.0	170 ± 13.7	128 ± 9.5	138 ± 5.2
33.0	80 ± 6.1	202 ± 14.1	182 ± 15.1	125 ± 6.5	146 ± 14.7
100.0	100 ± 12.2	186 ± 1.0	185 ± 1.2	126 ± 5.0	141 ± 6.5
333.0	42 ± 12.4 ^s	123 ± 6.1	163 ± 11.7	116 ± 6.4	112 ± 3.6
500.0	56 ± 5.2 ^s			57 ± 10.6 ^s	
1000.0		Toxic	12 ± 9.5 ^s		5 ± 3.0 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					282 ± 5.9
Positive Control ³	375 ± 5.8	465 ± 33.0			
Positive Control ⁴			361 ± 9.9		
Positive Control ⁵					
Positive Control ⁶				699 ± 27.2	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	124 ± 8.4
10.0	108 ± 7.2
33.0	114 ± 2.5
100.0	112 ± 7.8
333.0	101 ± 0.3
500.0	68 ± 17.1 ^s
1000.0	
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	596 ± 9.6
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	8 ± 1.3	10 ± 1.5	12 ± 3.4	15 ± 3.8	10 ± 1.5
10.0	12 ± 1.9	10 ± 3.0	8 ± 0.7	14 ± 1.7	11 ± 2.1
33.0	10 ± 2.0	9 ± 0.9	9 ± 1.2	9 ± 0.9	10 ± 1.2
100.0	10 ± 0.3	9 ± 1.2	11 ± 1.9	15 ± 1.9	11 ± 3.1
333.0	11 ± 0.9 ^s	6 ± 1.2	10 ± 1.8	12 ± 0.9	7 ± 1.5
500.0					
1000.0	0 ± 0.0 ^s	7 ± 2.5 ^s	6 ± 6.0 ^s	1 ± 0.7 ^s	Toxic
3333.0	Toxic			Toxic	
10000.0	0 ± 0.0 ^x			0 ± 0.0 ^x	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					34 ± 1.5
Positive Control ³	226 ± 13.1	169 ± 29.3			
Positive Control ⁵					
Positive Control ⁶			176 ± 17.4	158 ± 19.6	

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	8 ± 0.6
10.0	13 ± 2.0
33.0	7 ± 3.8
100.0	13 ± 0.3
333.0	16 ± 2.8
500.0	
1000.0	0 ± 0.0 ^s
3333.0	Toxic
10000.0	0 ± 0.0 ^x
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	64 ± 0.9
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	122 ± 16.0	130 ± 3.2	171 ± 6.6	232 ± 3.8	179 ± 7.9
10.0	124 ± 4.5	154 ± 0.3	179 ± 9.7	283 ± 20.0	199 ± 16.8
33.0	118 ± 7.4	148 ± 8.5	169 ± 6.2	200 ± 5.9	176 ± 7.8
100.0	118 ± 7.4	142 ± 11.4	181 ± 7.2	197 ± 10.7	164 ± 10.2
333.0	151 ± 9.7	89 ± 8.2 ^s	115 ± 19.9	222 ± 34.3	155 ± 13.4
500.0	97 ± 12.0 ^s			129 ± 4.8 ^s	
1000.0		Toxic	13 ± 3.8 ^s		15 ± 3.2 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					548 ± 24.0
Positive Control ⁶			1652 ± 102.8	790 ± 97.3	
Positive Control ⁷	705 ± 64.7	435 ± 43.7			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	236 ± 12.8
10.0	288 ± 22.9
33.0	236 ± 22.1
100.0	291 ± 7.3
333.0	242 ± 12.7
500.0	152 ± 28.6 ^s
1000.0	
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	1322 ± 90.4
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	21 ± 2.1	15 ± 1.9	20 ± 3.2	21 ± 1.7	14 ± 1.5
10.0	15 ± 1.3	12 ± 2.5	22 ± 2.5	17 ± 1.5	22 ± 3.5
33.0	20 ± 2.5	9 ± 2.4	14 ± 2.6	18 ± 1.3	16 ± 2.0
100.0	13 ± 0.3	12 ± 0.9	19 ± 1.0	18 ± 1.2	22 ± 3.3
333.0	5 ± 1.2 ^s	8 ± 0.6	12 ± 2.0	18 ± 1.0	21 ± 1.5
500.0	Toxic			6 ± 3.2 ^s	
1000.0		Toxic	2 ± 1.0 ^s		3 ± 3.0 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			156 ± 8.3		219 ± 6.9
Positive Control ⁸	69 ± 4.2	67 ± 5.2			
Positive Control ⁵				199 ± 10.3	

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	20 ± 0.7
10.0	23 ± 1.2
33.0	19 ± 3.4
100.0	20 ± 3.2
333.0	16 ± 1.5
500.0	4 ± 0.7 ^s
1000.0	
Trial Summary	Negative
Positive Control ²	
Positive Control ⁸	
Positive Control ⁵	507 ± 39.3

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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 **