

Experiment Number: 174209

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

G06: Ames Summary Data

Test Compound: **Dimenhydrinate**

CAS Number: **523-87-5**

Date Report Requested: **09/13/2018**

Time Report Requested: **14:04:38**

NTP Study Number:

174209

Study Result:

Equivocal

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	100 ± 6.8	155 ± 1.3	143 ± 7.1	102 ± 3.5	165 ± 5.2
33.0	118 ± 7.8	157 ± 9.4		123 ± 3.8	185 ± 9.5
100.0	107 ± 3.8	159 ± 7.2	122 ± 4.4	136 ± 2.8	169 ± 2.7
333.0	139 ± 7.2	176 ± 15.5	120 ± 9.2	133 ± 1.3	183 ± 8.3
1000.0	137 ± 8.4	222 ± 17.1	125 ± 20.7	157 ± 3.3	225 ± 8.9
1666.0			123 ± 4.7		
3333.0	0 ± 0.0 ^s	44 ± 43.7 ^s	28 ± 8.0 ^s	0 ± 0.0 ^s	0 ± 0.0 ^s
Trial Summary	Equivocal	Equivocal	Negative	Equivocal	Equivocal
Positive Control ²				591 ± 17.1	1151 ± 50.8
Positive Control ³	316 ± 14.8	579 ± 5.5	377 ± 8.7		

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Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	132 ± 7.8	124 ± 10.7	154 ± 9.6	116 ± 3.8
33.0		109 ± 8.9	143 ± 14.3	
100.0	154 ± 16.3	126 ± 1.8	159 ± 11.5	154 ± 19.1
333.0	153 ± 6.7	128 ± 6.2	178 ± 10.1	126 ± 9.6
1000.0	178 ± 22.2	138 ± 14.1	181 ± 22.5	139 ± 2.3
1666.0	163 ± 7.8			149 ± 11.4
3333.0	47 ± 32.0 ^s	122 ± 11.0	0 ± 0.0 ^s	133 ± 4.1
Trial Summary	Equivocal	Negative	Negative	Equivocal
Positive Control ²	456 ± 25.0	1185 ± 22.3	2803 ± 38.8	966 ± 42.3
Positive Control ³				

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	33 ± 3.2	58 ± 3.5	18 ± 0.9	30 ± 5.5	47 ± 5.1
33.0	32 ± 2.3	56 ± 7.2		34 ± 4.0	59 ± 8.0
100.0	41 ± 1.8	65 ± 7.1	26 ± 3.8	30 ± 0.3	61 ± 3.5
333.0	41 ± 6.2	76 ± 4.9	22 ± 4.7	39 ± 0.9	69 ± 2.5
1000.0	54 ± 5.5	73 ± 9.2	19 ± 0.7	59 ± 7.8	65 ± 2.4
1666.0			11 ± 2.1		
3333.0	0 ± 0.0 ^s	Toxic	Toxic	0 ± 0.0 ^s	0 ± 0.0 ^s
Trial Summary	Negative	Equivocal	Negative	Equivocal	Equivocal
Positive Control ³	387 ± 19.4	567 ± 14.4	342 ± 42.1		
Positive Control ⁴				197 ± 5.4	313 ± 9.3

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Strain: TA1535

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	27 ± 5.8	36 ± 2.4	47 ± 1.7	17 ± 0.0
33.0		35 ± 3.6	58 ± 7.0	
100.0	29 ± 4.2	36 ± 1.7	56 ± 6.5	26 ± 3.8
333.0	29 ± 2.0	36 ± 8.0	57 ± 9.9	33 ± 5.2
1000.0	29 ± 2.1	53 ± 0.9	78 ± 13.9	29 ± 4.6
1666.0	26 ± 7.5			25 ± 3.2
3333.0	0 ± 0.0 ^s	0 ± 0.0 ^s	0 ± 0.0 ^s	9 ± 2.0
Trial Summary	Negative	Equivocal	Equivocal	Negative
Positive Control ³				
Positive Control ⁴	178 ± 24.1	423 ± 24.1	707 ± 29.1	245 ± 10.7

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Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	5 ± 1.8	6 ± 1.5	9 ± 1.7	12 ± 2.6	6 ± 1.5
33.0	7 ± 1.0	12 ± 4.0	10 ± 2.0	14 ± 3.1	11 ± 1.3
100.0	7 ± 1.0	5 ± 0.0	8 ± 0.9	17 ± 1.7	7 ± 3.8
333.0	7 ± 2.8	8 ± 3.3	7 ± 4.0	14 ± 3.2	6 ± 1.3
1000.0	4 ± 0.6	10 ± 3.1	9 ± 2.1	15 ± 2.8	7 ± 1.9
3333.0	Toxic	11 ± 1.7	0 ± 0.0 ^s	0 ± 0.0 ^s	4 ± 1.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴			152 ± 6.3	177 ± 17.8	380 ± 13.1
Positive Control ⁵	428 ± 44.2	361 ± 12.3			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	9 ± 1.8
33.0	11 ± 2.4
100.0	11 ± 3.3
333.0	10 ± 3.7
1000.0	9 ± 2.6
3333.0	0 ± 0.0 ^s
Trial Summary	Negative
Positive Control ⁴	413 ± 2.5
Positive Control ⁵	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	23 ± 4.6	27 ± 0.6	27 ± 1.0	35 ± 8.8	55 ± 7.0
33.0	26 ± 0.7	30 ± 2.1		37 ± 3.5	46 ± 4.0
100.0	24 ± 3.8	27 ± 2.5	19 ± 3.5	33 ± 5.4	48 ± 1.5
333.0	26 ± 1.2	25 ± 4.1	20 ± 4.0	23 ± 2.2	38 ± 0.3
1000.0	17 ± 2.0	33 ± 1.9	16 ± 1.5	27 ± 1.7	48 ± 5.8
1666.0			17 ± 2.3		
3333.0	Toxic	0 ± 0.0 ^s	0 ± 0.0 ^s	0 ± 0.0 ^s	5 ± 2.6
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²				521 ± 4.2	871 ± 14.4
Positive Control ⁶	614 ± 49.1	828 ± 30.1	575 ± 33.3		

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Strain: TA98

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	28 ± 2.3	29 ± 4.5	56 ± 2.3	20 ± 3.6
33.0		38 ± 0.0	60 ± 3.2	
100.0	29 ± 2.3	37 ± 0.7	46 ± 3.8	32 ± 3.5
333.0	27 ± 5.1	28 ± 4.5	41 ± 4.5	32 ± 3.3
1000.0	31 ± 4.3	36 ± 3.2	46 ± 2.5	27 ± 3.4
1666.0	25 ± 3.8			21 ± 2.0
3333.0	0 ± 0.0 ^s	0 ± 0.0 ^s	Toxic	25 ± 2.2
Trial Summary	Negative	Negative	Negative	Negative
Positive Control ²	326 ± 10.7	968 ± 33.8	2400 ± 83.0	764 ± 21.3
Positive Control ⁶				

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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: 95% Ethanol

2: 1.0 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate Sodium Azide

4: 2.5 ug/Plate 2-Aminoanthracene

5: 50.0 ug/Plate 9-Aminoacridine

6: 5.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**** END OF REPORT ****