

Experiment Number: 637175

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

G06: Ames Summary Data

Test Compound: **Diphenhydramine hydrochloride**

CAS Number: **147-24-0**

Date Report Requested: **09/10/2018**

Time Report Requested: **23:20:55**

NTP Study Number:

637175

Study Result:

Negative

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G06: Ames Summary Data

Test Compound: Diphenhydramine hydrochloride
CAS Number: 147-24-0

Date Report Requested: 09/10/2018

Time Report Requested: 23:20:55

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	111 ± 3.6	90 ± 11.2	152 ± 15.6	112 ± 10.7	159 ± 9.2
10.0		78 ± 9.3		103 ± 3.2	
33.0	88 ± 2.9	83 ± 6.3	171 ± 3.0	84 ± 4.3	191 ± 2.6
100.0	108 ± 0.3	86 ± 4.5	173 ± 7.8	91 ± 1.5	187 ± 7.2
333.0	110 ± 5.2	86 ± 3.3	203 ± 3.8	87 ± 11.7	188 ± 2.3
1000.0	92 ± 0.3	78 ± 1.8	180 ± 4.0	86 ± 6.6	176 ± 5.6
3333.0	0 ± 0.0		Toxic		Toxic
Trial Summary	Negative	Negative	Equivocal	Negative	Negative
Positive Control ²			2197 ± 32.5	1439 ± 31.5	2144 ± 105.9
Positive Control ³	777 ± 10.0	511 ± 14.7			

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	115 ± 14.0
10.0	92 ± 4.7
33.0	95 ± 4.2
100.0	91 ± 3.8
333.0	92 ± 4.1
1000.0	83 ± 9.8
3333.0	
Trial Summary	Negative
Positive Control ²	1212 ± 23.5
Positive Control ³	

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	10 ± 3.2	9 ± 0.6	12 ± 2.7	8 ± 2.0	12 ± 3.6
10.0		8 ± 0.6		6 ± 1.5	
33.0	10 ± 1.2	7 ± 1.2	11 ± 1.3	8 ± 0.3	13 ± 1.2
100.0	15 ± 1.8	6 ± 3.8	12 ± 1.9	6 ± 1.2	13 ± 1.9
333.0	6 ± 0.7	4 ± 0.6	14 ± 1.2	6 ± 2.2	13 ± 1.2
1000.0	6 ± 0.6	5 ± 0.5	14 ± 2.0	5 ± 2.3	11 ± 0.9
3333.0	0 ± 0.0		Toxic		Toxic
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			115 ± 17.1	103 ± 7.5	124 ± 23.7
Positive Control ³	986 ± 22.7	408 ± 6.9			

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	12 ± 1.5
10.0	13 ± 0.3
33.0	11 ± 2.5
100.0	9 ± 2.0
333.0	8 ± 2.7
1000.0	5 ± 3.1
3333.0	
Trial Summary	Negative
Positive Control ²	57 ± 3.5
Positive Control ³	

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Test Compound: Diphenhydramine hydrochloride
CAS Number: 147-24-0

Date Report Requested: 09/10/2018

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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	7 ± 0.5	4 ± 1.5	8 ± 0.9	6 ± 1.2	12 ± 3.2
10.0		2 ± 0.6		7 ± 2.6	
33.0	3 ± 0.3	3 ± 0.3	10 ± 2.9	7 ± 0.9	15 ± 1.2
100.0	5 ± 0.6	3 ± 0.3	14 ± 0.6	7 ± 1.8	14 ± 1.0
333.0	4 ± 0.6	2 ± 0.6	13 ± 2.3	6 ± 1.7	11 ± 0.6
1000.0	Toxic	Toxic	14 ± 2.6	6 ± 2.0	12 ± 1.7
3333.0	0 ± 0.0		Toxic		Toxic
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			88 ± 16.4	89 ± 7.4	176 ± 4.9
Positive Control ⁴	982 ± 21.7	769 ± 48.3			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	9 ± 2.4
10.0	8 ± 1.9
33.0	8 ± 1.8
100.0	7 ± 1.7
333.0	5 ± 2.1
1000.0	7 ± 1.2
3333.0	
Trial Summary	Negative
Positive Control ²	135 ± 7.7
Positive Control ⁴	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	21 ± 6.4	12 ± 4.5	34 ± 6.1	26 ± 4.4	32 ± 4.4
10.0		12 ± 1.5		24 ± 2.7	
33.0	22 ± 3.3	12 ± 1.9	38 ± 1.9	29 ± 2.0	38 ± 1.9
100.0	22 ± 3.0	15 ± 3.1	39 ± 2.6	29 ± 3.2	27 ± 1.5
333.0	24 ± 2.3	14 ± 0.9	36 ± 1.8	23 ± 4.0	42 ± 3.7
1000.0	18 ± 3.0	7 ± 1.5	40 ± 2.3	26 ± 2.3	35 ± 1.9
3333.0	Toxic		Toxic		Toxic
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			1599 ± 27.7	900 ± 36.6	1602 ± 78.8
Positive Control ⁵	243 ± 8.5	206 ± 7.9			

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	23 ± 4.6
10.0	24 ± 1.3
33.0	26 ± 2.4
100.0	19 ± 0.3
333.0	21 ± 4.4
1000.0	24 ± 0.3
3333.0	
Trial Summary	Negative
Positive Control ²	926 ± 34.4
Positive Control ⁵	

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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: Water

2: 1.0 ug/Plate 2-Aminoanthracene

3: 3.3 ug/Plate Sodium Azide

4: 33.0 ug/Plate 9-Aminoacridine

5: 3.3 ug/Plate 4-Nitro-O-Phenylenediamine

**** END OF REPORT ****