

Experiment Number: A76506

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

G06: Ames Summary Data

Test Compound: **Hydrastine**

CAS Number: **118-08-1**

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

Time Report Requested: **22:59:30**

NTP Study Number:

A76506

Study Result:

Negative

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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	126 ± 3.5	137 ± 3.8	168 ± 9.1	140 ± 2.3	134 ± 7.8
100.0	115 ± 3.2	148 ± 8.7	169 ± 6.5	128 ± 8.1	117 ± 4.8
333.0	114 ± 13.3	136 ± 3.2	178 ± 7.2	143 ± 6.3	140 ± 4.2
1000.0	108 ± 7.1	140 ± 1.8	168 ± 5.5	133 ± 3.3	142 ± 3.5
3333.0	129 ± 1.8 ^p	133 ± 8.8 ^p	179 ± 1.3	121 ± 5.2	133 ± 7.8 ^p
10000.0	143 ± 3.8 ^p	122 ± 9.0 ^p	163 ± 2.5 ^p	127 ± 4.7 ^p	118 ± 2.6 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					341 ± 27.2
Positive Control ³	480 ± 36.4	422 ± 14.1			
Positive Control ⁴			655 ± 48.7		
Positive Control ⁵					
Positive Control ⁶				765 ± 38.4	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	124 ± 5.1
100.0	128 ± 1.2
333.0	121 ± 3.2
1000.0	123 ± 12.4
3333.0	138 ± 1.9
10000.0	117 ± 5.7 ^P
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	1454 ± 44.5
Positive Control ⁶	

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	12 ± 2.5	12 ± 2.7	10 ± 1.5	15 ± 0.3	9 ± 1.8
100.0	10 ± 0.0	7 ± 0.9	11 ± 1.5	12 ± 0.9	13 ± 0.9
333.0	11 ± 0.7	9 ± 2.0	12 ± 0.9	11 ± 1.8	12 ± 2.3
1000.0	12 ± 0.3	8 ± 2.0	11 ± 3.0	10 ± 1.8	10 ± 1.3
3333.0	10 ± 0.0 ^P	8 ± 0.6 ^P	8 ± 1.5 ^P	12 ± 1.5 ^P	8 ± 0.7
10000.0	11 ± 0.7 ^P	7 ± 1.8 ^P	9 ± 1.5 ^P	10 ± 0.3 ^P	8 ± 0.7 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³	306 ± 10.6	188 ± 5.9	196 ± 17.9		
Positive Control ⁵					
Positive Control ⁶				239 ± 5.2	243 ± 15.4

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Strain: TA1535

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	13 ± 2.3	18 ± 0.3	8 ± 0.6	13 ± 1.2
100.0	12 ± 2.3	14 ± 1.2	11 ± 0.6	10 ± 0.9
333.0	10 ± 2.5	15 ± 3.1	6 ± 0.3	14 ± 1.7
1000.0	12 ± 2.0	16 ± 2.0	11 ± 1.5	13 ± 1.7
3333.0	11 ± 0.5	9 ± 1.7	13 ± 3.0	11 ± 1.8
10000.0	9 ± 1.2 ^p	15 ± 2.0 ^p	11 ± 2.0 ^p	11 ± 1.2 ^p
Trial Summary	Negative	Negative	Negative	Negative
Positive Control ²		53 ± 3.9		
Positive Control ³				
Positive Control ⁵			84 ± 1.3	57 ± 12.2
Positive Control ⁶	166 ± 8.3			

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	175 ± 11.0	117 ± 4.4	139 ± 11.2	178 ± 9.4	203 ± 5.8
100.0	163 ± 10.5	120 ± 4.7	128 ± 12.6	174 ± 6.3	192 ± 4.7
333.0	170 ± 9.7	116 ± 8.9	156 ± 2.4	168 ± 16.3	187 ± 6.9
1000.0	160 ± 5.2	150 ± 6.0	162 ± 44.2	177 ± 6.4	195 ± 14.0
3333.0	164 ± 5.8 ^p	151 ± 6.8 ^p	145 ± 3.5 ^p	211 ± 8.1	202 ± 30.0
10000.0	174 ± 4.3 ^p	151 ± 7.5 ^p	128 ± 12.3 ^p	160 ± 5.3 ^p	229 ± 19.3 ^p
Trial Summary	Negative	Equivocal	Negative	Negative	Negative
Positive Control ⁴					
Positive Control ⁶				1511 ± 159.7	638 ± 21.7
Positive Control ⁷	413 ± 76.1	372 ± 62.9	536 ± 4.2		

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Strain: TA97

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	195 ± 4.2	146 ± 4.2	148 ± 6.0
100.0	159 ± 8.0	140 ± 6.4	124 ± 12.8
333.0	152 ± 6.7	132 ± 20.5	140 ± 1.3
1000.0	171 ± 7.0	177 ± 4.3	149 ± 10.5
3333.0	180 ± 5.7	186 ± 3.5	187 ± 10.1
10000.0	174 ± 4.0 ^p	206 ± 3.8 ^p	191 ± 6.1 ^p
Trial Summary	Negative	Equivocal	Negative
Positive Control ⁴	621 ± 28.1		
Positive Control ⁶		1051 ± 22.8	979 ± 43.9
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	13 ± 5.2	19 ± 1.7	19 ± 3.4	24 ± 2.3	25 ± 4.1
100.0	18 ± 2.2	15 ± 2.8	21 ± 3.2	29 ± 3.3	21 ± 1.3
333.0	10 ± 1.2	9 ± 0.6	24 ± 1.3	18 ± 1.9	18 ± 6.5
1000.0	8 ± 1.5	13 ± 4.2	17 ± 2.0	26 ± 3.8	14 ± 2.1
3333.0	10 ± 1.5 ^p	13 ± 1.0 ^p	28 ± 2.3	21 ± 2.6	24 ± 1.2 ^p
10000.0	9 ± 1.8 ^p	14 ± 2.0 ^p	22 ± 4.3 ^p	19 ± 1.0 ^p	20 ± 1.5 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			249 ± 8.8		284 ± 28.3
Positive Control ⁸	83 ± 12.1	104 ± 15.0			
Positive Control ⁵				265 ± 21.6	

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	28 ± 3.8
100.0	38 ± 2.2
333.0	38 ± 2.4
1000.0	29 ± 5.6
3333.0	27 ± 2.9
10000.0	25 ± 0.6 ^p
Trial Summary	Negative
Positive Control ²	
Positive Control ⁸	
Positive Control ⁵	380 ± 31.8

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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
- p: Precipitate

** END OF REPORT **