

Experiment Number: 481338

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

G06: Ames Summary Data

Test Compound: **Monosodium glutamate**

CAS Number: 142-47-2

Date Report Requested: 09/11/2018

Time Report Requested: 17:03:13

NTP Study Number:

481338

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	110 ± 8.8	204 ± 17.5	223 ± 18.3	113 ± 10.1	231 ± 3.4
100.0	107 ± 7.3	224 ± 8.4	214 ± 15.1	96 ± 4.1	209 ± 13.6
333.0	104 ± 7.7	211 ± 5.2	206 ± 5.2	102 ± 1.5	221 ± 2.2
1000.0	103 ± 2.6	206 ± 21.4	212 ± 8.0	112 ± 4.4	229 ± 8.4
3333.0	111 ± 3.5	217 ± 4.2	212 ± 6.2	120 ± 3.7	199 ± 7.3
10000.0	108 ± 0.5	Toxic	212 ± 14.6	114 ± 9.0	208 ± 19.1
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					548 ± 7.5
Positive Control ³	451 ± 16.1	484 ± 13.2			
Positive Control ⁴			1446 ± 27.8		
Positive Control ⁵					
Positive Control ⁶				1458 ± 4.7	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	133 ± 2.9
100.0	122 ± 3.2
333.0	118 ± 9.5
1000.0	111 ± 9.2
3333.0	114 ± 3.2
10000.0	115 ± 4.0
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	814 ± 26.5
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	22 ± 3.5	24 ± 2.9	20 ± 2.3	11 ± 2.0	14 ± 1.5
100.0	22 ± 0.7	25 ± 2.1	15 ± 3.2	13 ± 1.9	16 ± 1.2
333.0	20 ± 2.1	25 ± 2.9	15 ± 4.1	15 ± 1.5	17 ± 3.5
1000.0	16 ± 2.6	32 ± 4.6	12 ± 1.5	12 ± 2.6	15 ± 1.7
3333.0	18 ± 2.6	25 ± 3.1	15 ± 2.6	14 ± 1.7	19 ± 3.1
10000.0	20 ± 1.5	30 ± 4.2	12 ± 1.5	11 ± 3.1	16 ± 2.3
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					77 ± 7.1
Positive Control ³	216 ± 13.1	380 ± 4.3			
Positive Control ⁵					
Positive Control ⁶			403 ± 20.7	232 ± 12.1	

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Test Compound: Monosodium glutamate
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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	14 ± 1.2
100.0	11 ± 2.0
333.0	12 ± 1.5
1000.0	11 ± 2.6
3333.0	11 ± 1.9
10000.0	9 ± 0.5
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	111 ± 3.0
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	103 ± 4.9	66 ± 7.0	102 ± 6.9	195 ± 13.1	87 ± 6.7
100.0	105 ± 2.0	65 ± 7.2	98 ± 6.0	194 ± 4.8	83 ± 7.6
333.0	99 ± 2.0	75 ± 7.6	96 ± 0.7	198 ± 8.9	65 ± 8.8
1000.0	118 ± 4.7	78 ± 6.3	92 ± 4.6	196 ± 8.0	71 ± 2.0
3333.0	118 ± 3.2	67 ± 2.0	113 ± 3.6	193 ± 2.5	83 ± 2.0
10000.0	107 ± 1.5	66 ± 5.8	110 ± 24.0	190 ± 5.6	63 ± 8.1
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					291 ± 16.7
Positive Control ⁶			2222 ± 54.6		
Positive Control ⁷				869 ± 35.6	
Positive Control ⁸					
Positive Control ⁹	537 ± 3.1	133 ± 11.1			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	172 ± 5.7
100.0	176 ± 7.5
333.0	168 ± 2.1
1000.0	156 ± 2.9
3333.0	208 ± 13.3
10000.0	195 ± 5.9
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	
Positive Control ⁷	1145 ± 42.7
Positive Control ⁸	
Positive Control ⁹	

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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	23 ± 1.5	27 ± 2.8	38 ± 1.9	37 ± 4.2	30 ± 4.4
100.0	18 ± 1.2	31 ± 3.6	46 ± 7.7	32 ± 5.0	32 ± 3.5
333.0	19 ± 2.6	31 ± 2.1	50 ± 0.3	36 ± 4.7	31 ± 1.5
1000.0	24 ± 0.3	31 ± 3.0	48 ± 1.9	37 ± 3.5	27 ± 2.0
3333.0	22 ± 3.5	36 ± 2.6	43 ± 5.9	38 ± 7.5	32 ± 4.0
10000.0	20 ± 2.1	24 ± 2.0	46 ± 4.0	33 ± 3.8	31 ± 2.8
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ¹⁰					264 ± 9.5
Positive Control ²			229 ± 2.7		
Positive Control ¹¹	337 ± 7.3	177 ± 8.4			
Positive Control ⁵				499 ± 6.6	

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	35 ± 3.5
100.0	24 ± 4.3
333.0	36 ± 1.7
1000.0	35 ± 4.8
3333.0	30 ± 4.1
10000.0	27 ± 0.5
Trial Summary	Negative
Positive Control ¹⁰	
Positive Control ²	180 ± 2.3
Positive Control ¹¹	
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: 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: 2.5 ug/Plate 2-Aminoanthracene

8: 8.0 ug/Plate 9-Aminoacridine

9: 24.0 ug/Plate 9-Aminoacridine

10: 0.2 ug/Plate 2-Aminoanthracene

11: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

**** END OF REPORT ****