

Experiment Number: 274391

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

G06: Ames Summary Data

Test Compound: **4-Nitro-o-phenylenediamine**

CAS Number: **99-56-9**

Date Report Requested: **09/18/2018**

Time Report Requested: **09:01:34**

NTP Study Number:

274391

Study Result:

Positive

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	98 ± 4.4	85 ± 4.9	107 ± 1.5	186 ± 2.2	116 ± 7.9
3.3		342 ± 4.8			
10.0	195 ± 9.5	463 ± 43.4		286 ± 12.4	
33.0	333 ± 22.6	667 ± 26.8		543 ± 17.9	
100.0	697 ± 8.2	633 ± 15.6	428 ± 23.4	547 ± 25.7	731 ± 48.1
333.0	593 ± 55.3	489 ± 16.2	809 ± 20.5	790 ± 3.7	1225 ± 41.2
1000.0	375 ± 55.0		1141 ± 66.0	1310 ± 19.1 ^P	1691 ± 78.8
3333.0			1104 ± 73.9 ^P		1339 ± 23.1 ^P
10000.0			1298 ± 194.4 ^P		1197 ± 323.5 ^P
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control ²			2103 ± 86.6	2784 ± 45.1	1696 ± 231.8
Positive Control ³	1137 ± 99.8	1137 ± 21.3			

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	143 ± 8.8
3.3	
10.0	407 ± 25.7
33.0	1015 ± 46.1
100.0	1214 ± 22.7
333.0	1501 ± 21.7
1000.0	1762 ± 58.4 ^p
3333.0	
10000.0	
Trial Summary	Positive
Positive Control ²	1175 ± 177.2
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	9 ± 1.3	5 ± 0.3	6 ± 2.0	9 ± 2.0	18 ± 2.4
3.3		10 ± 1.5	6 ± 2.0		
10.0	11 ± 2.1	18 ± 1.2	10 ± 2.4		
33.0	12 ± 2.3	33 ± 6.0	17 ± 2.3		29 ± 3.1
100.0	21 ± 4.3	15 ± 4.4	7 ± 1.5	16 ± 1.8	34 ± 3.8
333.0	Toxic	8 ± 1.3	Toxic	22 ± 0.6	41 ± 5.9
1000.0	Toxic			59 ± 3.9	100 ± 2.4 ^p
3333.0				10 ± 2.9 ^p	16 ± 1.0 ^p
10000.0				0 ± 0.0 ^p	
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control ⁴				146 ± 9.4	129 ± 14.8
Positive Control ³	161 ± 8.1	770 ± 67.0	486 ± 69.2		

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	12 ± 1.8	5 ± 0.3
3.3		
10.0		
33.0		18 ± 1.2
100.0	39 ± 1.7	30 ± 1.5
333.0	63 ± 5.7	36 ± 2.1
1000.0	79 ± 5.9	23 ± 1.2 ^p
3333.0	49 ± 4.7 ^p	17 ± 1.0 ^p
10000.0	36 ± 2.3 ^p	
Trial Summary	Positive	Positive
Positive Control ⁴	174 ± 19.3	144 ± 9.8
Positive Control ³		

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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	6 ± 0.7	4 ± 0.7	6 ± 1.5	10 ± 1.5	9 ± 0.6
3.3		7 ± 2.5			
10.0	44 ± 9.0	15 ± 4.5			
33.0	101 ± 6.4	70 ± 6.4		45 ± 2.6	
100.0	156 ± 11.4	110 ± 12.0	132 ± 4.6	111 ± 5.2	314 ± 20.4
333.0	11 ± 2.3	6 ± 1.7	176 ± 13.9	145 ± 10.7	511 ± 31.5
1000.0	3 ± 1.2		197 ± 43.5	172 ± 23.8 ^p	69 ± 12.7
3333.0			34 ± 6.0 ^p	42 ± 21.4 ^p	78 ± 9.7 ^p
10000.0			2 ± 1.5 ^p		22 ± 14.9 ^p
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control ⁴			150 ± 8.8	157 ± 78.0	133 ± 20.0
Positive Control ⁵	346 ± 108.3	303 ± 85.3			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	5 ± 2.8
3.3	
10.0	57 ± 9.1
33.0	68 ± 10.7
100.0	218 ± 12.5
333.0	202 ± 6.2
1000.0	40 ± 14.0 ^p
3333.0	
10000.0	
Trial Summary	Positive
Positive Control ⁴	155 ± 49.4
Positive Control ⁵	

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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	13 ± 2.3	19 ± 0.9	17 ± 2.6	39 ± 3.7	24 ± 1.2
Control Group					3.3
513 ± 37.3	219 ± 8.6				
210 ± 16.3	677 ± 20.4		482 ± 8.1		950 ± 55.0
569 ± 30.1	1492 ± 77.9		975 ± 43.7		1919 ± 6.0
1289 ± 26.7	1762 ± 51.0	1331 ± 14.3	1161 ± 27.4	1606 ± 85.7	1972 ± 78.3
2029 ± 39.5	2220 ± 16.9	1665 ± 39.2	1448 ± 47.7	2168 ± 44.3	2046 ± 12.1
2073 ± 173.2		2653 ± 37.0	2269 ± 89.4 ^P	2878 ± 14.0	2482 ± 17.7 ^P
		3028 ± 40.5 ^P		2752 ± 113.4 ^P	
		2857 ± 72.2 ^P		2737 ± 83.7 ^P	
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control ²			2566 ± 141.0	2159 ± 28.8	1198 ± 33.4

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	27 ± 0.6
Control Group	296 ± 8.5
513 ± 37.3	10.0
210 ± 16.3	33.0
569 ± 30.1	100.0
1289 ± 26.7	333.0
2029 ± 39.5	1000.0
2073 ± 173.2	3333.0
	10000.0
Trial Summary	Positive
Positive Control ²	835 ± 86.4

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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: 1.0 ug/Plate 2-Aminoanthracene

3: 3.3 ug/Plate Sodium Azide

4: 2.0 ug/Plate 2-Aminoanthracene

5: 33.0 ug/Plate 9-Aminoacridine

p: Precipitate

**** END OF REPORT ****