

Experiment Number: 132615

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

G06: Ames Summary Data

Test Compound: **Toluene**

CAS Number: **108-88-3**

Date Report Requested: **09/12/2018**

Time Report Requested: **07:54:59**

NTP Study Number:

132615

Study Result:

Negative

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G06: Ames Summary Data

Date Report Requested: 09/12/2018

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

Time Report Requested: 07:54:59

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	86 ± 6.8	99 ± 5.2	89 ± 5.5	92 ± 3.8	113 ± 2.0
10.0	98 ± 11.2	88 ± 4.3	47 ± 3.8	88 ± 2.4	108 ± 2.5
33.3	99 ± 12.7	110 ± 23.8	53 ± 1.8	90 ± 6.8	117 ± 12.5
100.0	94 ± 7.5	167 ± 51.1	58 ± 3.2	84 ± 2.3	124 ± 5.5
333.3	93 ± 4.2	226 ± 52.3	60 ± 4.7	96 ± 7.4	114 ± 18.3
1000.0	71 ± 2.1 ^s	90 ± 3.8 ^s	51 ± 3.2 ^s	103 ± 10.4	95 ± 14.2 ^s
Trial Summary	Negative	Positive	Negative	Negative	Negative
Positive Control ²	519 ± 14.7	625 ± 28.8	494 ± 8.4		
Positive Control ³				604 ± 39.5	460 ± 15.3

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	104 ± 5.3	115 ± 8.7
10.0	85 ± 5.0	96 ± 6.0
33.3	99 ± 4.6	112 ± 4.5
100.0	102 ± 6.7	118 ± 15.6
333.3	94 ± 2.7	100 ± 1.9
1000.0	86 ± 9.3	69 ± 10.8
Trial Summary	Negative	Negative
Positive Control ²		
Positive Control ³	1507 ± 41.2	963 ± 104.3

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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	20 ± 2.6	20 ± 1.0	6 ± 1.3	13 ± 3.0	10 ± 0.3
10.0	24 ± 4.3	17 ± 0.6	9 ± 3.2	8 ± 2.0	12 ± 3.1
33.3	22 ± 3.9	22 ± 3.9	9 ± 2.0	10 ± 1.5	8 ± 0.9
100.0	16 ± 2.3	14 ± 2.2	10 ± 3.1	11 ± 1.5	10 ± 2.5
333.3	19 ± 4.4	21 ± 3.5	9 ± 1.5	8 ± 2.2	8 ± 2.6
1000.0	12 ± 0.9 ^s	14 ± 1.7 ^s	8 ± 2.7	9 ± 1.8 ^s	11 ± 3.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³			389 ± 11.4		
Positive Control ²	512 ± 18.9	444 ± 23.0			
Positive Control ⁴				305 ± 3.2	374 ± 16.0

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	13 ± 0.6
10.0	11 ± 2.7
33.3	11 ± 2.5
100.0	10 ± 1.2
333.3	12 ± 2.6
1000.0	7 ± 0.9 ^s
Trial Summary	Negative
Positive Control ³	
Positive Control ²	
Positive Control ⁴	268 ± 34.8

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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 ± 1.0	8 ± 1.0	14 ± 1.2	14 ± 1.9	16 ± 2.2
10.0	7 ± 1.0	8 ± 0.9	16 ± 4.8	13 ± 2.0	19 ± 4.0
33.3	6 ± 0.3	8 ± 2.9	9 ± 3.0	14 ± 3.5	19 ± 1.2
100.0	10 ± 1.3	9 ± 3.0	7 ± 1.0	10 ± 1.2	20 ± 2.7
333.3	7 ± 1.0	9 ± 2.0	7 ± 1.2	11 ± 2.0	15 ± 1.5
1000.0	7 ± 1.9	6 ± 2.3 ^s	5 ± 0.9	9 ± 2.2 ^s	17 ± 1.8
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴			365 ± 19.7	158 ± 10.6	556 ± 24.3
Positive Control ⁵	227 ± 43.8	710 ± 64.7			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	12 ± 2.7
10.0	11 ± 1.9
33.3	12 ± 1.9
100.0	14 ± 3.2
333.3	18 ± 5.5
1000.0	2 ± 1.0 ^s
Trial Summary	Negative
Positive Control ⁴	244 ± 5.8
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	17 ± 2.4	27 ± 3.1	27 ± 3.5	35 ± 2.3	25 ± 0.9
10.0	22 ± 3.0	28 ± 0.3	24 ± 1.8	35 ± 3.4	26 ± 5.9
33.3	21 ± 3.4	25 ± 0.3	23 ± 3.7	37 ± 2.9	29 ± 6.4
100.0	19 ± 5.2	24 ± 5.9	23 ± 3.8	28 ± 1.5	28 ± 0.7
333.3	22 ± 3.3	25 ± 3.4	17 ± 0.7	32 ± 4.7	26 ± 4.1
1000.0	16 ± 0.7	19 ± 2.9 ^s	23 ± 2.2	29 ± 0.3 ^s	29 ± 1.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³			428 ± 24.2	288 ± 3.0	1292 ± 27.6
Positive Control ⁶	645 ± 7.4	636 ± 3.4			

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	37 ± 4.7
10.0	33 ± 1.3
33.3	41 ± 1.8
100.0	34 ± 1.5
333.3	39 ± 4.1
1000.0	20 ± 2.6 ^s
Trial Summary	Negative
Positive Control ³	1258 ± 130.5
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: Dimethyl Sulfoxide
- 2: 1.0 ug/Plate Sodium Azide
- 3: 1.0 ug/Plate 2-Aminoanthracene
- 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 ****