

Experiment Number: 700142

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

G06: Ames Summary Data

Test Compound: **Isobutyraldehyde**

CAS Number: **78-84-2**

Date Report Requested: **09/11/2018**

Time Report Requested: **18:47:16**

NTP Study Number:

700142

Study Result:

Negative

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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	120 ± 3.2	98 ± 6.4	111 ± 7.8	117 ± 3.9	106 ± 4.4
100.0	110 ± 8.4	79 ± 6.5	109 ± 15.9	94 ± 8.2	118 ± 6.7
333.0	101 ± 1.5	80 ± 0.3	114 ± 17.1	86 ± 8.5	126 ± 10.3
1000.0	108 ± 9.1	80 ± 6.0	101 ± 14.9	92 ± 9.9	122 ± 10.0
3333.0	109 ± 12.2	81 ± 3.6	105 ± 1.7	64 ± 8.4	112 ± 6.6
10000.0	Toxic	82 ± 8.4	78 ± 12.5	87 ± 9.2	115 ± 3.6
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²	358 ± 7.0	332 ± 24.8			
Positive Control ³			534 ± 46.0	505 ± 28.0	1469 ± 61.2

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	108 ± 10.7
100.0	84 ± 8.4
333.0	78 ± 1.2
1000.0	78 ± 6.0
3333.0	75 ± 1.2
10000.0	89 ± 0.6
Trial Summary	Negative
Positive Control ²	
Positive Control ³	1359 ± 38.4

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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	24 ± 2.6	19 ± 0.0	10 ± 2.2	9 ± 2.1	10 ± 2.4
100.0	35 ± 4.8	22 ± 2.2	10 ± 2.8	4 ± 0.9	10 ± 2.1
333.0	31 ± 7.8	16 ± 2.0	11 ± 3.7	7 ± 0.3	12 ± 1.5
1000.0	39 ± 4.0	18 ± 1.5	6 ± 1.2	8 ± 0.9	14 ± 1.9
3333.0	Toxic	15 ± 1.8	6 ± 1.0	7 ± 0.9	11 ± 1.2
10000.0	Toxic	16 ± 4.6	7 ± 1.9	8 ± 2.1	8 ± 3.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²	375 ± 15.5	292 ± 10.0			
Positive Control ⁴			146 ± 2.8	188 ± 17.4	381 ± 7.9

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	13 ± 0.6
100.0	7 ± 2.5
333.0	6 ± 0.9
1000.0	5 ± 0.6
3333.0	4 ± 1.5
10000.0	5 ± 0.7
Trial Summary	Negative
Positive Control ²	
Positive Control ⁴	447 ± 18.5

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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	5 ± 0.6	5 ± 0.6	7 ± 0.7	5 ± 0.6	6 ± 1.0
100.0	4 ± 1.0	4 ± 1.9	9 ± 0.3	8 ± 0.0	10 ± 1.8
333.0	7 ± 0.9	3 ± 0.9	8 ± 3.0	6 ± 0.9	8 ± 0.3
1000.0	5 ± 1.3	3 ± 1.2	5 ± 2.0	5 ± 0.3	10 ± 1.3
3333.0	Toxic	4 ± 1.2	9 ± 4.4	5 ± 1.3	8 ± 2.2
10000.0	Toxic	9 ± 2.0	6 ± 1.5	7 ± 1.0	7 ± 3.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴			157 ± 8.7	135 ± 17.4	424 ± 75.9
Positive Control ⁵	184 ± 4.7	129 ± 6.9			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	6 ± 1.2
100.0	7 ± 0.7
333.0	5 ± 0.3
1000.0	8 ± 3.2
3333.0	4 ± 0.9
10000.0	8 ± 1.2
Trial Summary	Negative
Positive Control ⁴	436 ± 28.4
Positive Control ⁵	

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Mutagenicity**G06: Ames Summary Data**

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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	15 ± 0.6	13 ± 2.1	17 ± 3.6	25 ± 3.2	25 ± 2.2
100.0	24 ± 1.9	13 ± 3.5	30 ± 1.7	20 ± 0.6	36 ± 3.0
333.0	20 ± 0.9	13 ± 2.0	31 ± 1.5	21 ± 4.3	29 ± 1.5
1000.0	20 ± 3.2	12 ± 3.0	30 ± 1.5	21 ± 2.7	32 ± 0.3
3333.0	Toxic	13 ± 2.5	30 ± 4.8	18 ± 0.9	33 ± 1.8
10000.0	Toxic	17 ± 5.7	26 ± 2.9	23 ± 4.4	33 ± 4.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³			473 ± 34.3	507 ± 6.6	1274 ± 85.7
Positive Control ⁶	626 ± 20.6	415 ± 6.7			

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	29 ± 1.7
100.0	17 ± 2.7
333.0	19 ± 3.0
1000.0	23 ± 4.1
3333.0	18 ± 3.1
10000.0	25 ± 3.0
Trial Summary	Negative
Positive Control ³	1461 ± 63.9
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

**** END OF REPORT ****