

Experiment Number: 234350

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

G06: Ames Summary Data

Test Compound: **Isobutyl nitrite**

CAS Number: **542-56-3**

Date Report Requested: **09/15/2018**

Time Report Requested: **04:16:05**

NTP Study Number:

234350

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	118 ± 4.5	143 ± 7.1	116 ± 10.4	132 ± 7.8	131 ± 14.3
100.0	130 ± 10.6		130 ± 3.5		137 ± 6.7
333.0	112 ± 7.5	115 ± 11.8	118 ± 10.9	145 ± 6.9	141 ± 2.7
1000.0	121 ± 5.6	108 ± 5.5	124 ± 6.4	166 ± 11.8	144 ± 2.2
3333.0	153 ± 5.3	153 ± 5.5	146 ± 2.3	217 ± 11.2	197 ± 5.5
6666.0		181 ± 5.0		222 ± 17.6	
10000.0	218 ± 14.5	0 ± 0.0 ^s	221 ± 7.2	0 ± 0.0 ^s	251 ± 27.5
Trial Summary	Positive	Equivocal	Positive	Positive	Positive
Positive Control ²			439 ± 14.4	456 ± 24.8	683 ± 19.1
Positive Control ³	417 ± 10.7	377 ± 8.7			

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	116 ± 3.8
100.0	
333.0	141 ± 0.9
1000.0	152 ± 10.1
3333.0	220 ± 4.8
6666.0	251 ± 22.5
10000.0	138 ± 69.7
Trial Summary	Positive
Positive Control ²	966 ± 42.3
Positive Control 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	36 ± 3.2	18 ± 0.9	36 ± 8.6	27 ± 5.8	35 ± 5.0
100.0	25 ± 4.9		24 ± 2.3		30 ± 2.8
333.0	22 ± 3.8	25 ± 1.9	28 ± 7.0	23 ± 4.4	24 ± 2.3
1000.0	27 ± 0.6	29 ± 1.3	31 ± 3.3	23 ± 3.2	30 ± 1.7
3333.0	32 ± 3.0	34 ± 2.3	32 ± 2.9	19 ± 3.2	38 ± 5.2
6666.0		30 ± 4.7		21 ± 7.4	
10000.0	60 ± 1.7	20 ± 11.3 ^s	52 ± 6.9	0 ± 0.0 ^s	13 ± 13.3 ^s
Trial Summary	Equivocal	Equivocal	Equivocal	Negative	Negative
Positive Control ²					
Positive Control ³	476 ± 28.6	342 ± 42.1			
Positive Control ⁴			324 ± 11.1	178 ± 24.1	314 ± 9.5

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	17 ± 0.0
100.0	
333.0	27 ± 4.9
1000.0	25 ± 2.6
3333.0	58 ± 1.8
6666.0	62 ± 7.3
10000.0	0 ± 0.0 ^s
Trial Summary	Positive
Positive Control ²	245 ± 10.7
Positive Control ³	
Positive Control ⁴	

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Strain: TA1537

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	8 ± 0.7	8 ± 2.6	7 ± 3.1
100.0	5 ± 1.2	7 ± 0.9	12 ± 2.6
333.0	5 ± 0.7	12 ± 1.5	9 ± 1.8
1000.0	6 ± 1.2	6 ± 1.7	6 ± 1.8
3333.0	7 ± 1.5	8 ± 1.9	6 ± 1.5
10000.0	9 ± 1.5	7 ± 0.9	2 ± 2.3 ^s
Trial Summary	Negative	Negative	Negative
Positive Control ⁴		292 ± 1.9	319 ± 28.5
Positive Control ⁵	151 ± 11.7		

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Date Report Requested: 09/15/2018

Time Report Requested: 04:16:05

Strain: TA98

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	26 ± 0.6	44 ± 4.6	36 ± 0.0
100.0	21 ± 1.5	31 ± 1.9	32 ± 3.5
333.0	22 ± 3.5	36 ± 3.8	34 ± 5.0
1000.0	15 ± 3.5	33 ± 1.8	39 ± 3.5
3333.0	20 ± 4.3	25 ± 3.2	40 ± 6.1
10000.0	32 ± 2.6	31 ± 1.2	11 ± 11.0 ^s
Trial Summary	Negative	Negative	Negative
Positive Control ²		313 ± 4.1	691 ± 134.3
Positive Control ⁶	749 ± 43.9		

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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: 95% Ethanol

2: 1.0 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate Sodium Azide

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 ****