

Experiment Number: 375955

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

G06: Ames Summary Data

Test Compound: **alpha-Naphthyl isothiocyanate**

CAS Number: 551-06-4

Date Report Requested: 09/14/2018

Time Report Requested: 03:20:01

NTP Study Number:

375955

Study Result:

Positive

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Test Compound: alpha-Naphthyl isothiocyanate

CAS Number: 551-06-4

Date Report Requested: 09/14/2018

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	150 ± 1.7	112 ± 12.7	112 ± 7.4	127 ± 3.2	121 ± 13.8
0.01		122 ± 12.5			
0.03		119 ± 8.7			
0.1	131 ± 4.4	112 ± 5.3	138 ± 5.0		
0.3	141 ± 4.9	127 ± 0.9	140 ± 3.5		
1.0	151 ± 17.1	133 ± 9.0	145 ± 17.2		
3.0	66 ± 5.0 ^s		149 ± 3.8		
10.0	2 ± 2.0 ^s		135 ± 9.7	134 ± 6.7	142 ± 2.1
16.0					153 ± 0.9
33.0				153 ± 10.1	177 ± 3.8
66.0				172 ± 12.3	196 ± 6.9
100.0				119 ± 4.9	149 ± 19.0
166.0				14 ± 2.4 ^s	
Trial Summary	Negative	Negative	Equivocal	Equivocal	Weakly Positive
Positive Control ²					
Positive Control ³			486 ± 17.6	603 ± 7.4	705 ± 17.4
Positive Control ⁴	331 ± 8.4	526 ± 14.7			

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Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	127 ± 2.0	152 ± 10.1	149 ± 9.2	137 ± 6.8	165 ± 4.4
0.01					
0.03					
0.1					
0.3					
1.0	139 ± 7.0	112 ± 13.2		117 ± 6.7	154 ± 9.0
3.0	139 ± 7.4	120 ± 1.5		145 ± 3.3	154 ± 11.8
10.0	143 ± 14.8	132 ± 5.0	137 ± 5.7	169 ± 5.8	184 ± 17.4
16.0					
33.0	183 ± 12.2	148 ± 7.0	155 ± 16.3	138 ± 17.9	248 ± 45.1
66.0			168 ± 7.6		
100.0	162 ± 7.1	185 ± 5.0	184 ± 9.5	56 ± 13.2	410 ± 86.7
166.0			189 ± 7.4		
Trial Summary	Equivocal	Negative	Equivocal	Negative	Positive
Positive Control ²				794 ± 9.2	
Positive Control ³	1343 ± 24.1	398 ± 18.4	326 ± 9.9		692 ± 28.9
Positive Control ⁴					

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	119 ± 3.8
0.01	
0.03	
0.1	
0.3	
1.0	
3.0	
10.0	128 ± 11.3
16.0	149 ± 4.7
33.0	185 ± 11.6
66.0	218 ± 21.9
100.0	160 ± 25.1
166.0	
Trial Summary	Positive
Positive Control ²	
Positive Control ³	1359 ± 81.5
Positive Control ⁴	

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Date Report Requested: 09/14/2018

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	19 ± 2.6	27 ± 2.1	12 ± 1.7	11 ± 1.0	16 ± 0.7
0.01		25 ± 1.8			
0.03		21 ± 2.4			
0.1	15 ± 0.6	25 ± 2.4	11 ± 1.5		
0.3	16 ± 0.9	19 ± 0.7	12 ± 2.0		
1.0	15 ± 0.5	20 ± 0.3	11 ± 1.9	15 ± 1.5	15 ± 1.2
3.0	6 ± 0.9 ^s		9 ± 0.9	12 ± 2.5	13 ± 1.8
10.0	6 ± 1.9 ^s		9 ± 2.0	13 ± 4.0	12 ± 1.2
33.0				14 ± 0.6	13 ± 0.9
100.0				12 ± 3.3	13 ± 1.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴	331 ± 7.5	461 ± 17.6			
Positive Control ³					
Positive Control ⁵			142 ± 6.2	266 ± 22.2	122 ± 7.1

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	8 ± 2.7	12 ± 3.2
0.01		
0.03		
0.1		
0.3		
1.0	7 ± 1.2	13 ± 2.3
3.0	7 ± 0.6	9 ± 2.6
10.0	8 ± 0.3	7 ± 0.9
33.0	7 ± 1.5	11 ± 3.2
100.0	4 ± 2.5	16 ± 1.9
Trial Summary	Negative	Negative
Positive Control ⁴		
Positive Control ³	231 ± 13.9	
Positive Control ⁵		427 ± 12.4

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Strain: TA1537

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	11 ± 0.6
10.0	11 ± 0.9
16.0	12 ± 1.8
33.0	11 ± 1.2
66.0	15 ± 2.0
100.0	13 ± 0.3
Trial Summary	Negative
Positive Control ³	659 ± 30.6

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Test Compound: alpha-Naphthyl isothiocyanate

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Date Report Requested: 09/14/2018

Time Report Requested: 03:20:01

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	120 ± 8.6	148 ± 12.2	173 ± 7.5	162 ± 6.9	192 ± 9.7
0.01		159 ± 14.3			
0.03		155 ± 5.8			
0.1	133 ± 5.0	168 ± 2.5	184 ± 11.6		
0.3	138 ± 6.6	154 ± 11.3	179 ± 18.5		
1.0	151 ± 6.9	154 ± 3.5	195 ± 5.7	203 ± 4.6	167 ± 15.0
3.0	46 ± 3.0 ^s		184 ± 6.5	199 ± 4.6	170 ± 13.1
10.0	38 ± 5.5 ^s		193 ± 9.1	195 ± 4.2	177 ± 13.8
16.0					
33.0				195 ± 4.4	152 ± 23.5
66.0					
100.0				168 ± 4.0	183 ± 21.3
Trial Summary	Equivocal	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³			383 ± 9.5	867 ± 14.8	
Positive Control ⁵					357 ± 23.0
Positive Control ⁶	443 ± 17.8	318 ± 9.5			

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Date Report Requested: 09/14/2018

Time Report Requested: 03:20:01

Strain: TA97

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	180 ± 7.5	166 ± 11.3	176 ± 13.1
0.01			
0.03			
0.1			
0.3			
1.0	162 ± 2.3	152 ± 17.1	
3.0	154 ± 12.7	185 ± 22.8	
10.0	166 ± 9.6	158 ± 12.6	187 ± 13.9
16.0			214 ± 9.8
33.0	166 ± 6.7	199 ± 31.7	211 ± 14.2
66.0			323 ± 16.4
100.0	118 ± 5.8	261 ± 39.2	362 ± 32.8
Trial Summary	Negative	Weakly Positive	Positive
Positive Control ²	514 ± 13.1		
Positive Control ³		450 ± 9.2	318 ± 21.9
Positive Control ⁵			
Positive Control ⁶			

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	22 ± 2.1	24 ± 1.8	29 ± 5.8	36 ± 1.5	35 ± 2.6
0.01		26 ± 2.2			
0.03		23 ± 3.4			
0.1	20 ± 4.4	20 ± 3.4	32 ± 2.4		
0.3	24 ± 4.4	22 ± 3.9	28 ± 3.6		
1.0	21 ± 2.9	25 ± 2.3	34 ± 2.6	33 ± 4.6	22 ± 1.5
3.0	13 ± 2.8 ^s		35 ± 4.1	40 ± 3.9	24 ± 4.7
10.0	4 ± 0.6 ^s		32 ± 4.7	39 ± 4.6	32 ± 5.2
16.0					
33.0				43 ± 4.8	27 ± 0.9
66.0					
100.0				30 ± 2.6	40 ± 4.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³			182 ± 18.2	661 ± 37.9	102 ± 3.0
Positive Control ⁷	729 ± 20.0	1143 ± 19.3			

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	30 ± 3.4	36 ± 5.4	36 ± 4.4
0.01			
0.03			
0.1			
0.3			
1.0	29 ± 0.9	25 ± 4.6	
3.0	40 ± 1.2	36 ± 6.9	
10.0	40 ± 1.0	33 ± 7.5	37 ± 0.6
16.0			49 ± 3.8
33.0	34 ± 5.8	48 ± 6.1	50 ± 9.7
66.0			71 ± 6.4
100.0	21 ± 2.6	70 ± 9.2	70 ± 15.3
Trial Summary	Negative	Weakly Positive	Positive
Positive Control ²	507 ± 12.7		
Positive Control ³		401 ± 69.3	414 ± 17.8
Positive Control ⁷			

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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: 0.5 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate 2-Aminoanthracene

4: 1.0 ug/Plate Sodium Azide

5: 2.5 ug/Plate 2-Aminoanthracene

6: 25.0 ug/Plate 9-Aminoacridine

7: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**** END OF REPORT ****