

Experiment Number: 392857

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Pentenenitrile

CAS Number: 13284-42-9

Date Report Requested: 09/14/2018

Time Report Requested: 10:41:34

NTP Study Number:

392857

Study Result:

Negative

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Test Compound: 2-Pentenenitrile

CAS Number: 13284-42-9

Date Report Requested: 09/14/2018

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	80 ± 5.2	86 ± 9.8	94 ± 9.2	100 ± 5.0	96 ± 9.8
33.0	96 ± 3.9	82 ± 5.2	91 ± 3.5	97 ± 4.3	95 ± 5.7
100.0	79 ± 4.7	87 ± 12.8	82 ± 0.3	98 ± 5.9	85 ± 9.4
333.0	85 ± 3.2	83 ± 7.2	89 ± 12.1	99 ± 5.0	89 ± 9.2
1000.0	91 ± 2.3	90 ± 9.1	93 ± 7.5	86 ± 6.9	88 ± 10.7
2000.0	108 ± 7.1 ^s		90 ± 8.7		98 ± 0.5
3333.0		82 ± 9.0		109 ± 12.0 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					387 ± 21.5
Positive Control ³	245 ± 12.7	260 ± 5.8			
Positive Control ⁴			348 ± 19.6		
Positive Control ⁵					
Positive Control ⁶				443 ± 14.4	

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Date Report Requested: **09/14/2018**

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	120 ± 5.0
33.0	113 ± 5.2
100.0	98 ± 16.7
333.0	125 ± 4.5
1000.0	112 ± 5.8
2000.0	
3333.0	95 ± 9.8
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	533 ± 15.2
Positive Control ⁶	

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	22 ± 5.5	20 ± 2.8	8 ± 1.5	12 ± 2.6	9 ± 2.0
33.0	16 ± 1.0	25 ± 1.2	8 ± 3.2	15 ± 2.0	10 ± 1.2
100.0	13 ± 3.0	Toxic	9 ± 1.9	11 ± 1.5	13 ± 2.0
333.0	13 ± 1.3	22 ± 2.2	10 ± 2.8	14 ± 2.3	14 ± 1.0
1000.0	14 ± 1.3	26 ± 2.5 ^s	9 ± 1.2	19 ± 3.6	13 ± 1.2
2000.0	12 ± 1.5 ^s		7 ± 2.1		13 ± 3.5
3333.0		15 ± 1.9 ^s		13 ± 1.2 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					49 ± 2.4
Positive Control ³	147 ± 14.8	110 ± 3.2			
Positive Control ⁵					
Positive Control ⁶			145 ± 3.0	76 ± 4.4	

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	11 ± 0.6
33.0	12 ± 4.0
100.0	17 ± 0.3
333.0	18 ± 0.9
1000.0	13 ± 2.4
2000.0	
3333.0	11 ± 2.0 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	165 ± 1.7
Positive Control ⁶	

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Test Compound: 2-Pentenenitrile
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Date Report Requested: 09/14/2018
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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	3 ± 0.3	3 ± 0.6
33.0	4 ± 1.0	4 ± 0.3
100.0	2 ± 0.3	6 ± 1.2
333.0	5 ± 1.0	3 ± 0.6
1000.0	5 ± 0.9	4 ± 0.9
2000.0	3 ± 0.6	5 ± 0.7
3333.0	4 ± 0.3 ^s	3 ± 0.9 ^s
Trial Summary	Negative	Negative
Positive Control ⁴	381 ± 27.3	
Positive Control ⁷		110 ± 8.1

Experiment Number: 392857

Test Type: Genetic Toxicology - Bacterial
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Test Compound: 2-Pentenenitrile

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Date Report Requested: 09/14/2018

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	110 ± 7.5	66 ± 2.0	84 ± 8.4	75 ± 8.5	191 ± 12.2
33.0	101 ± 8.5	63 ± 2.1	113 ± 6.7	88 ± 4.4	207 ± 1.7
100.0	107 ± 6.1	67 ± 2.9	95 ± 8.8	104 ± 1.0	211 ± 4.3
333.0	112 ± 11.2	71 ± 1.2	85 ± 2.0	80 ± 0.5	191 ± 16.9
1000.0	109 ± 4.1	60 ± 8.2	97 ± 5.9	98 ± 0.9	212 ± 5.8 ^s
2000.0			88 ± 8.0	81 ± 12.7 ^s	
3333.0	104 ± 13.1	51 ± 5.8			159 ± 17.1 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴				577 ± 18.0	
Positive Control ⁶			726 ± 14.8		
Positive Control ⁷					445 ± 16.2
Positive Control ⁸		1038 ± 94.2			
Positive Control ⁹	471 ± 84.5				

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Strain: TA97

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	92 ± 3.2	87 ± 10.5	88 ± 3.8	93 ± 12.5	161 ± 8.5
33.0	171 ± 12.2	96 ± 5.8	104 ± 2.4	84 ± 4.3	144 ± 2.1
100.0	132 ± 3.8	104 ± 5.0	117 ± 7.2	83 ± 4.0	193 ± 2.6
333.0	87 ± 7.5	99 ± 8.6	94 ± 12.5	82 ± 5.6	218 ± 14.1
1000.0	Toxic	99 ± 2.6	92 ± 2.9	89 ± 9.0	205 ± 16.9 ^s
2000.0	199 ± 22.6	126 ± 23.5 ^s	100 ± 12.2	85 ± 4.5 ^s	
3333.0			101 ± 4.9 ^s	76 ± 6.6 ^s	172 ± 13.3 ^s
Trial Summary	Equivocal	Negative	Negative	Negative	Equivocal
Positive Control ⁴	642 ± 34.4	554 ± 10.2	654 ± 71.7	1586 ± 26.1	
Positive Control ⁶					
Positive Control ⁷					726 ± 24.4
Positive Control ⁸					
Positive Control ⁹					

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	106 ± 3.1
33.0	98 ± 6.6
100.0	98 ± 1.5
333.0	103 ± 5.0
1000.0	119 ± 7.5
2000.0	102 ± 9.5 ^s
3333.0	90 ± 2.0 ^s
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	
Positive Control ⁷	1007 ± 13.7
Positive Control ⁸	
Positive Control ⁹	

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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	13 ± 3.2	19 ± 1.2	16 ± 0.9	36 ± 2.5	33 ± 2.0
33.0	13 ± 1.0	27 ± 2.5	20 ± 1.0	32 ± 2.3	37 ± 6.0
100.0	14 ± 3.1	27 ± 4.8	22 ± 3.2	30 ± 5.3	27 ± 1.5
333.0	11 ± 2.0	19 ± 6.7	20 ± 1.5	33 ± 5.2	31 ± 3.2
1000.0	15 ± 3.6	21 ± 2.9 ^s	20 ± 3.2	27 ± 2.8	29 ± 3.0
2000.0	14 ± 1.7 ^s		26 ± 0.3	32 ± 3.9	
3333.0		20 ± 4.3 ^s		22 ± 3.2 ^s	26 ± 5.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ¹⁰					
Positive Control ²			105 ± 8.7	111 ± 8.5	
Positive Control ¹¹	129 ± 6.4	251 ± 11.3			
Positive Control ⁵					135 ± 36.7

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	22 ± 1.5	34 ± 0.0
33.0	25 ± 3.8	31 ± 5.5
100.0	26 ± 2.0	29 ± 2.3
333.0	23 ± 4.5	35 ± 1.2
1000.0	30 ± 3.3	41 ± 1.9 ^s
2000.0	24 ± 1.2	
3333.0		35 ± 3.5 ^s
Trial Summary	Negative	Negative
Positive Control ¹⁰	105 ± 10.0	
Positive Control ²		86 ± 5.2
Positive Control ¹¹		
Positive Control ⁵		

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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: 0.4 ug/Plate 2-Aminoanthracene

3: 0.5 ug/Plate Sodium Azide

4: 0.75 ug/Plate 2-Aminoanthracene

5: 1.0 ug/Plate 2-Aminoanthracene

6: 2.0 ug/Plate 2-Aminoanthracene

7: 2.5 ug/Plate 2-Aminoanthracene

8: 4.0 ug/Plate 9-Aminoacridine

9: 8.0 ug/Plate 9-Aminoacridine

10: 0.2 ug/Plate 2-Aminoanthracene

11: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**** END OF REPORT ****