

Experiment Number: 972130

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

G06: Ames Summary Data

Test Compound: **Ninhydrin**

CAS Number: **485-47-2**

Date Report Requested: **09/18/2018**

Time Report Requested: **02:23:39**

NTP Study Number:

972130

Study Result:

Equivocal

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Test Compound: Ninhydrin

CAS Number: 485-47-2

Date Report Requested: 09/18/2018

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 5% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	102 ± 7.0	143 ± 10.7	117 ± 3.7	103 ± 13.0	128 ± 6.7
1.0	103 ± 3.2				
3.0	99 ± 6.3	159 ± 10.1		102 ± 7.6	
10.0	96 ± 5.8	161 ± 10.8	120 ± 8.4	98 ± 3.3	134 ± 9.1
33.0	107 ± 7.6	150 ± 5.3	119 ± 2.7	102 ± 14.4	142 ± 3.5
100.0	82 ± 2.5 ^s	150 ± 13.0	123 ± 5.6	133 ± 19.6	155 ± 6.2
166.0		160 ± 3.5	156 ± 7.8		189 ± 0.9
333.0			146 ± 11.8 ^s	173 ± 3.0	198 ± 6.9
666.0					
Trial Summary	Negative	Negative	Equivocal	Equivocal	Weakly Positive
Positive Control ²					
Positive Control ³				339 ± 69.0	
Positive Control ⁴	530 ± 25.2	497 ± 38.9			
Positive Control ⁵			644 ± 20.9		462 ± 11.3

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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	151 ± 6.8	110 ± 5.1	128 ± 9.3	116 ± 4.0	132 ± 17.0
1.0					
3.0					105 ± 4.0
10.0	154 ± 2.4	117 ± 10.8	144 ± 4.8	135 ± 16.4	114 ± 6.0
33.0	169 ± 14.7	127 ± 6.1	143 ± 12.5	128 ± 12.0	117 ± 2.8
100.0	163 ± 7.1	124 ± 5.5	139 ± 3.8	141 ± 5.6	123 ± 11.3
166.0	145 ± 17.7		149 ± 4.5		
333.0	190 ± 10.2	147 ± 11.6	176 ± 0.6	71 ± 14.1 ^s	112 ± 3.5
666.0		44 ± 15.9 ^s		9 ± 2.3 ^s	
Trial Summary	Equivocal	Equivocal	Equivocal	Negative	Negative
Positive Control ²				458 ± 84.4	
Positive Control ³	582 ± 33.0	413 ± 11.3			238 ± 17.8
Positive Control ⁴					
Positive Control ⁵			454 ± 73.8		

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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	15 ± 1.5	23 ± 2.5	14 ± 2.3	11 ± 2.5	11 ± 1.3
1.0	13 ± 3.9				
3.0	9 ± 0.6	25 ± 1.3	16 ± 2.2		
10.0	9 ± 0.9	23 ± 1.2	12 ± 1.5	8 ± 1.2	12 ± 0.6
33.0	4 ± 1.2	19 ± 1.7	9 ± 1.9	11 ± 0.6	10 ± 0.3
100.0	4 ± 0.9	17 ± 1.9	14 ± 1.8	10 ± 1.5	10 ± 1.2
166.0		12 ± 2.4			
333.0			10 ± 2.6	8 ± 2.3	3 ± 0.6 ^s
666.0				0 ± 0.0 ^s	1 ± 0.6 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					168 ± 20.4
Positive Control ⁴	267 ± 4.7	332 ± 14.2			
Positive Control ⁶			198 ± 10.7	100 ± 0.9	

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Date Report Requested: 09/18/2018
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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	9 ± 0.7
1.0	
3.0	10 ± 0.9
10.0	14 ± 0.9
33.0	8 ± 1.5
100.0	7 ± 1.7
166.0	
333.0	6 ± 1.5
666.0	
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	
Positive Control ⁶	310 ± 24.2

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Date Report Requested: 09/18/2018
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Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	6 ± 1.5	8 ± 1.5	12 ± 1.2	11 ± 0.9	11 ± 0.0
1.0	5 ± 1.2				
3.0	5 ± 1.0	9 ± 1.9	9 ± 1.2		
10.0	5 ± 0.6	9 ± 0.6	11 ± 1.8	8 ± 2.6	10 ± 1.0
33.0	8 ± 1.0	10 ± 2.4	8 ± 1.2	10 ± 1.2	12 ± 0.9
100.0	6 ± 1.2	15 ± 1.2	13 ± 1.3	11 ± 2.2	12 ± 1.2
166.0		6 ± 0.7 ^s			
333.0			13 ± 2.0	14 ± 0.9	4 ± 0.6
666.0				2 ± 0.6 ^s	3 ± 0.7 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					50 ± 2.9
Positive Control ³			43 ± 2.8		
Positive Control ⁶				56 ± 4.2	
Positive Control ⁷	301 ± 29.2	376 ± 62.4			

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Strain: TA1537

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	11 ± 0.3
1.0	
3.0	7 ± 1.5
10.0	13 ± 2.2
33.0	7 ± 0.6
100.0	6 ± 1.2
166.0	
333.0	9 ± 3.1
666.0	
Trial Summary	Negative
Positive Control ²	
Positive Control ³	49 ± 2.8
Positive Control ⁶	
Positive Control ⁷	

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	153 ± 0.9	157 ± 3.6	195 ± 8.8	155 ± 11.4	180 ± 14.5
1.0	159 ± 2.6				
3.0	169 ± 5.4	168 ± 11.6	213 ± 2.0		
10.0	160 ± 0.3	161 ± 4.9	135 ± 67.6	208 ± 1.0	193 ± 3.8
33.0	173 ± 11.2	192 ± 9.3	171 ± 5.8	187 ± 21.7	183 ± 17.1
100.0	106 ± 9.4	171 ± 13.3	182 ± 15.6	171 ± 11.9	189 ± 1.0
166.0		110 ± 10.4			
333.0			199 ± 11.3	204 ± 3.9	183 ± 9.2
666.0				76 ± 5.8 ^s	2 ± 0.9 ^s
Trial Summary	Negative	Negative	Negative	Equivocal	Negative
Positive Control ²					613 ± 20.5
Positive Control ³			498 ± 3.9		
Positive Control ⁶				440 ± 6.9	
Positive Control ⁷	499 ± 49.7	986 ± 88.5			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	160 ± 8.2
1.0	
3.0	181 ± 6.8
10.0	137 ± 68.3
33.0	187 ± 9.1
100.0	171 ± 4.6
166.0	
333.0	185 ± 4.5
666.0	
Trial Summary	Equivocal
Positive Control ²	
Positive Control ³	396 ± 6.8
Positive Control ⁶	
Positive Control ⁷	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	23 ± 1.2	25 ± 3.8	34 ± 7.2	29 ± 3.8	36 ± 6.6
1.0	25 ± 1.7				
3.0	23 ± 2.3	22 ± 1.3	25 ± 3.5		
10.0	23 ± 2.1	28 ± 2.1	27 ± 2.8	29 ± 1.9	38 ± 4.1
33.0	18 ± 1.9	27 ± 1.5	27 ± 2.8	33 ± 3.2	34 ± 5.7
100.0	19 ± 2.8	36 ± 4.0	35 ± 2.6	27 ± 3.1	33 ± 1.7
166.0		21 ± 2.0			
333.0			22 ± 2.3	28 ± 1.3	18 ± 4.4 ^s
666.0				8 ± 3.2 ^s	8 ± 1.7 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					384 ± 45.2
Positive Control ³			318 ± 33.8	64 ± 2.0	
Positive Control ⁸	449 ± 16.4				
Positive Control ⁹		675 ± 40.9			

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	29 ± 1.5
1.0	
3.0	28 ± 2.7
10.0	29 ± 2.0
33.0	21 ± 1.3
100.0	22 ± 2.5
166.0	
333.0	19 ± 2.9
666.0	
Trial Summary	Negative
Positive Control ²	
Positive Control ³	69 ± 3.9
Positive Control ⁸	
Positive Control 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: Dimethyl Sulfoxide

2: 0.5 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate 2-Aminoanthracene

4: 1.0 ug/Plate Sodium Azide

5: 2.0 ug/Plate 2-Aminoanthracene

6: 2.5 ug/Plate 2-Aminoanthracene

7: 50.0 ug/Plate 9-Aminoacridine

8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

9: 50.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

** END OF REPORT **