

Experiment Number: A30997

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 13-cis-Retinal

CAS Number: 472-86-6

Date Report Requested: 09/16/2018

Time Report Requested: 15:30:14

NTP Study Number:

A30997

Study Result:

Weakly Positive

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control ¹	130 ± 2.6	135 ± 2.3	114 ± 3.5	97 ± 4.0	107 ± 8.7
10.0	126 ± 1.0				
33.0	131 ± 10.4				
100.0	125 ± 9.9	124 ± 4.4	124 ± 2.3	116 ± 3.4	
166.0		127 ± 0.6	132 ± 3.1	125 ± 11.1	
333.0	157 ± 3.2	153 ± 2.9	148 ± 4.4	157 ± 5.5	
666.0		160 ± 4.7	171 ± 11.5	171 ± 3.7	
1000.0	177 ± 3.0	170 ± 1.8	190 ± 6.1	184 ± 4.9	103 ± 11.4
1666.0					105 ± 11.5
3333.0					125 ± 3.5 ^x
6666.0					132 ± 5.9 ^x
10000.0					203 ± 7.6 ^x
Trial Summary	Equivocal	Equivocal	Weakly Positive	Weakly Positive	Equivocal
Positive Control ²					
Positive Control ³					831 ± 7.9
Positive Control ⁴	878 ± 19.5	854 ± 18.7	901 ± 21.7	934 ± 18.9	
Positive Control ⁵					

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Strain: TA100

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	132 ± 3.5	104 ± 3.8	125 ± 3.4	105 ± 7.7	105 ± 5.0
10.0					
33.0					
100.0	133 ± 2.7				
166.0					
333.0	130 ± 7.3				
666.0					
1000.0	135 ± 5.8	109 ± 2.6	133 ± 2.2	114 ± 3.1	103 ± 7.3
1666.0		102 ± 10.1	148 ± 3.5	135 ± 10.7	101 ± 4.1
3333.0	151 ± 2.9 ^x	131 ± 7.3 ^x	171 ± 2.7 ^x	165 ± 4.2	140 ± 1.8 ^x
6666.0		150 ± 9.5 ^x	187 ± 5.9 ^x	181 ± 3.0	153 ± 6.2 ^x
10000.0	194 ± 7.9 ^x	193 ± 10.8 ^x	222 ± 7.6 ^x	184 ± 8.1	187 ± 5.0 ^x
Trial Summary	Equivocal	Weakly Positive	Weakly Positive	Weakly Positive	Weakly Positive
Positive Control ²					951 ± 18.9
Positive Control ³					
Positive Control ⁴					
Positive Control ⁵	570 ± 11.9	618 ± 8.2	510 ± 7.5	662 ± 16.1	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	137 ± 2.6	106 ± 6.1	125 ± 6.6	117 ± 12.9
10.0				
33.0				
100.0	145 ± 7.6			
166.0				
333.0	142 ± 2.4			
666.0				
1000.0	142 ± 13.5	105 ± 7.1	134 ± 3.8	124 ± 11.3
1666.0		99 ± 3.8	161 ± 9.3	139 ± 16.8
3333.0	195 ± 3.8 ^x	121 ± 8.5 ^x	177 ± 2.1 ^x	156 ± 5.5
6666.0		150 ± 1.0 ^x	192 ± 12.4 ^x	197 ± 9.8
10000.0	244 ± 4.1 ^x	219 ± 17.0 ^x	227 ± 9.0 ^x	210 ± 10.1
Trial Summary	Weakly Positive	Weakly Positive	Weakly Positive	Weakly Positive
Positive Control ²				
Positive Control ³	620 ± 12.8	751 ± 20.6	575 ± 23.6	705 ± 9.1
Positive Control ⁴				
Positive Control ⁵				

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Strain: TA1535

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	11 ± 2.0	10 ± 1.2	10 ± 1.7
100.0	12 ± 1.5		
166.0	14 ± 2.7		
333.0	12 ± 1.0		
666.0	9 ± 1.3		
1000.0	14 ± 1.3	11 ± 1.5	10 ± 2.0
1666.0		10 ± 2.0	11 ± 0.7
3333.0		11 ± 0.3 ^x	13 ± 1.0 ^x
6666.0		11 ± 0.7 ^x	11 ± 0.9 ^x
10000.0		10 ± 2.3 ^x	8 ± 0.3 ^x
Trial Summary	Negative	Negative	Negative
Positive Control ⁶	926 ± 13.2		
Positive Control ⁵			116 ± 6.8
Positive Control ⁷		117 ± 10.7	

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Strain: TA98

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	22 ± 2.3	24 ± 2.0	23 ± 2.6
10.0	20 ± 1.2		
33.0	24 ± 0.3		
100.0	17 ± 4.2	28 ± 3.5	25 ± 2.3
333.0	23 ± 2.3	24 ± 1.7	23 ± 0.7
1000.0	15 ± 3.2	22 ± 2.6	25 ± 2.2
3333.0		25 ± 1.9 ^x	21 ± 1.5 ^x
10000.0		23 ± 1.2 ^x	26 ± 4.2 ^x
Trial Summary	Negative	Negative	Negative
Positive Control ³			561 ± 10.4
Positive Control ⁸	500 ± 14.2		
Positive Control ⁵		449 ± 16.3	

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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 2-Aminoanthracene
- 3: 2.0 ug/Plate 2-Aminoanthracene
- 4: 5.0 ug/Plate Sodium Azide
- 5: 5.0 ug/Plate 2-Aminoanthracene
- 6: 5.0 ug/Plate N-Methyl-N-Nitro-N-Nitrosoguanidine
- 7: 10.0 ug/Plate 2-Aminoanthracene
- 8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
- x: Slight Toxicity and Precipitate

**** END OF REPORT ****