

Experiment Number: 114105

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

G06: Ames Summary Data

Test Compound: **Chrysophanic acid (1,8-dihydroxy-3-methylantraquinone)**

CAS Number: 481-74-3

Date Report Requested: 09/11/2018

Time Report Requested: 20:17:40

NTP Study Number:

114105

Study Result:

Weakly Positive

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Test Compound: Chrysophanic acid (1,8-dihydroxy-3-methylantraquinone)

Time Report Requested: 20:17:40

CAS Number: 481-74-3

Strain: TA100

Dose (ug/Plate)	Without S9	With 5% Rat S9	With 5% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	111 ± 6.5	95 ± 11.1	105 ± 17.2	99 ± 12.0	114 ± 12.7
1.0	115 ± 5.3				
3.0	91 ± 5.7		131 ± 11.2		130 ± 7.8
10.0	94 ± 2.9	94 ± 4.2	158 ± 5.7	126 ± 6.3	134 ± 4.2
16.0			157 ± 3.3		163 ± 2.4
33.0	86 ± 5.8	135 ± 5.7	147 ± 7.9	145 ± 10.4	157 ± 7.6
66.0			142 ± 7.2		166 ± 3.8
100.0	83 ± 2.7	148 ± 2.5	124 ± 11.6	169 ± 5.0	163 ± 7.8
166.0			134 ± 9.6		151 ± 12.5
333.0		107 ± 3.8	109 ± 7.2	148 ± 3.8	137 ± 5.5
666.0		98 ± 2.3 ^p		121 ± 4.3 ^p	
Trial Summary	Negative	Equivocal	Equivocal	Weakly Positive	Equivocal
Positive Control ²					
Positive Control ³		706 ± 33.0	908 ± 78.7	369 ± 17.9	477 ± 35.2
Positive Control ⁴					
Positive Control ⁵	1384 ± 50.2				

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Strain: TA100

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 5% Hamster S9	With 5% Hamster S9
Vehicle Control ¹	135 ± 5.6	134 ± 4.9	119 ± 3.7	98 ± 5.0	121 ± 3.0
1.0					
3.0			126 ± 6.8		110 ± 10.6
10.0	154 ± 5.8	110 ± 11.2	147 ± 7.5	104 ± 13.2	144 ± 15.9
16.0			143 ± 4.3		133 ± 9.8
33.0	139 ± 15.1	136 ± 4.9	145 ± 11.1	131 ± 8.2	155 ± 2.6
66.0			182 ± 4.2		142 ± 4.6
100.0	189 ± 12.7	154 ± 9.9	178 ± 10.5	124 ± 5.0	99 ± 12.7
166.0			177 ± 12.1		124 ± 7.4
333.0	193 ± 6.8	156 ± 5.7	178 ± 10.8	112 ± 6.9	132 ± 8.5
666.0	185 ± 17.9 ^P	146 ± 3.8 ^P		81 ± 2.7 ^P	
Trial Summary	Weakly Positive	Negative	Equivocal	Equivocal	Negative
Positive Control ²				1458 ± 109.2	1058 ± 13.6
Positive Control ³					
Positive Control ⁴	393 ± 22.6	430 ± 19.9	434 ± 24.7		
Positive Control ⁵					

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CAS Number: 481-74-3

Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	86 ± 3.0	118 ± 14.1	107 ± 9.5	125 ± 7.9	132 ± 9.5
1.0					
3.0		108 ± 5.7			129 ± 10.3
10.0	105 ± 14.9	126 ± 7.9	134 ± 10.4	102 ± 6.7	147 ± 3.3
16.0		138 ± 1.2			146 ± 3.8
33.0	126 ± 6.7	143 ± 5.5	122 ± 10.4	125 ± 8.5	151 ± 12.4
66.0		148 ± 8.3			162 ± 9.3
100.0	132 ± 4.5	127 ± 4.3	152 ± 1.2	145 ± 11.0	156 ± 10.2
166.0		134 ± 2.3			157 ± 1.5
333.0	123 ± 8.3	114 ± 8.5	160 ± 10.8	154 ± 2.7	123 ± 7.0
666.0	118 ± 6.4 ^P		165 ± 9.8 ^P	142 ± 11.7 ^P	
Trial Summary	Equivocal	Negative	Weakly Positive	Negative	Negative
Positive Control ²	856 ± 72.5	987 ± 39.3			
Positive Control ³			590 ± 26.3	696 ± 30.5	731 ± 40.3
Positive Control ⁴					
Positive Control ⁵					

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Time Report Requested: 20:17:40

CAS Number: 481-74-3

Strain: TA1535

Dose (ug/Plate)	With 5% Rat S9	With 10% Rat S9	With 30% Rat S9	With 5% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	5 ± 2.4	5 ± 0.9	6 ± 1.5	6 ± 0.9	7 ± 1.2
3.0	6 ± 0.6	4 ± 1.8	4 ± 1.9	7 ± 0.6	5 ± 1.0
10.0	5 ± 2.2	3 ± 0.9	6 ± 1.2	7 ± 1.5	4 ± 1.2
16.0	4 ± 0.9	5 ± 0.7	6 ± 1.2	4 ± 0.3	6 ± 0.9
33.0	4 ± 0.7	7 ± 0.9	5 ± 1.2	5 ± 1.5	4 ± 1.5
66.0	6 ± 1.3	5 ± 0.3	7 ± 1.0	6 ± 0.3	6 ± 2.6
100.0	9 ± 2.4	7 ± 1.5	8 ± 1.2	7 ± 1.5	8 ± 2.1
166.0	7 ± 1.2	12 ± 2.4	10 ± 1.9	8 ± 2.7	6 ± 1.0
333.0	8 ± 0.6	13 ± 1.3	7 ± 1.8	5 ± 0.3	6 ± 1.2
Trial Summary	Negative	Equivocal	Negative	Negative	Negative
Positive Control ³				89 ± 9.4	68 ± 5.6
Positive Control ⁴	51 ± 2.8	36 ± 1.8			
Positive Control ⁶			48 ± 3.5		

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Time Report Requested: 20:17:40

CAS Number: 481-74-3

Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	7 ± 2.1
3.0	7 ± 0.7
10.0	7 ± 3.0
16.0	7 ± 2.3
33.0	9 ± 1.2
66.0	4 ± 0.6
100.0	7 ± 0.6
166.0	10 ± 1.2
333.0	9 ± 0.9
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	109 ± 16.1
Positive Control ⁶	

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CAS Number: 481-74-3

Strain: TA98

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	20 ± 0.6	40 ± 5.2	21 ± 3.3
1.0	22 ± 0.3		
3.0	14 ± 2.8		
10.0	10 ± 0.9	32 ± 1.9	20 ± 3.8
33.0	10 ± 0.9	31 ± 4.3	27 ± 3.2
100.0	13 ± 0.3	35 ± 2.3	29 ± 1.5
333.0		31 ± 2.1	28 ± 2.6
666.0		37 ± 5.6 ^p	28 ± 1.8 ^p
Trial Summary	Negative	Negative	Negative
Positive Control ³		138 ± 13.3	482 ± 30.1
Positive Control ⁷	515 ± 29.5		

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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: 0.5 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate 2-Aminoanthracene

4: 2.5 ug/Plate 2-Aminoanthracene

5: 5.0 ug/Plate Sodium Azide

6: 5.0 ug/Plate 2-Aminoanthracene

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

p: Precipitate

**** END OF REPORT ****