

Experiment Number: 187053

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: C.I. Direct blue 53

CAS Number: 314-13-6

Date Report Requested: 09/14/2018

Time Report Requested: 00:46:38

NTP Study Number:

187053

Study Result:

Equivocal

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	142 ± 6.5	145 ± 9.8	130 ± 11.3	151 ± 10.2	127 ± 4.9
100.0	136 ± 4.3		134 ± 4.4		131 ± 0.7
333.0	143 ± 3.2	132 ± 3.8	153 ± 3.5	130 ± 9.3	143 ± 7.5
1000.0	160 ± 5.8	137 ± 3.3	129 ± 8.5	123 ± 9.6	131 ± 4.1
3333.0	145 ± 7.0	131 ± 1.7	133 ± 4.7	133 ± 0.6	126 ± 3.5
6000.0		137 ± 4.8		137 ± 11.8	
10000.0	127 ± 7.3	140 ± 3.8	137 ± 2.5	132 ± 4.6	136 ± 5.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					1052 ± 24.0
Positive Control ³			576 ± 56.7	779 ± 64.2	
Positive Control ⁴	2015 ± 42.3	967 ± 43.4			

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	149 ± 2.6
100.0	
333.0	123 ± 9.5
1000.0	132 ± 4.5
3333.0	126 ± 1.2
6000.0	123 ± 5.5
10000.0	137 ± 5.9
Trial Summary	Negative
Positive Control ²	1098 ± 84.2
Positive Control ³	
Positive Control ⁴	

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control ¹	30 ± 2.8	26 ± 2.8	24 ± 6.5	28 ± 3.6	9 ± 3.1
100.0	34 ± 1.7				13 ± 1.5
333.0	28 ± 2.4	21 ± 2.5	22 ± 2.1	28 ± 2.7	8 ± 0.3
1000.0	35 ± 2.9	24 ± 1.3	22 ± 4.1	32 ± 4.3	14 ± 1.2
3333.0	41 ± 1.2	18 ± 1.8	19 ± 2.3	24 ± 2.6	24 ± 2.3
6000.0		17 ± 2.6	19 ± 0.3	25 ± 2.0	
10000.0	29 ± 3.2	17 ± 2.3	20 ± 3.0	27 ± 2.9	34 ± 4.0
Trial Summary	Negative	Negative	Negative	Negative	Positive
Positive Control ²					
Positive Control ³					49 ± 5.4
Positive Control ⁴	1587 ± 24.2	1437 ± 35.4	708 ± 55.5	926 ± 35.4	

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Strain: TA1535

Dose (ug/Plate)	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	12 ± 2.2	11 ± 1.8	12 ± 1.2	14 ± 1.2	8 ± 0.0
100.0					12 ± 1.2
333.0	9 ± 1.5	12 ± 2.9	13 ± 4.3	16 ± 0.7	9 ± 1.9
1000.0	11 ± 1.5	16 ± 2.0	12 ± 3.6	16 ± 1.3	10 ± 2.2
3333.0	14 ± 0.6	22 ± 1.7	27 ± 7.8	19 ± 2.5	18 ± 3.8
6000.0	21 ± 0.3	27 ± 2.2	31 ± 3.1	18 ± 2.0	
10000.0	19 ± 3.7	28 ± 2.6	31 ± 1.0	20 ± 1.2	23 ± 5.4
Trial Summary	Negative	Weakly Positive	Equivocal	Negative	Weakly Positive
Positive Control ²					114 ± 9.7
Positive Control ³	120 ± 15.1	72 ± 4.1	75 ± 5.2	76 ± 6.1	
Positive Control ⁴					

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	9 ± 3.0	14 ± 1.2	13 ± 0.9	13 ± 1.5
100.0				
333.0	8 ± 0.9	13 ± 2.2	13 ± 3.3	14 ± 3.3
1000.0	12 ± 3.2	11 ± 1.2	13 ± 0.9	13 ± 2.0
3333.0	13 ± 3.3	14 ± 3.2	19 ± 1.5	12 ± 2.0
6000.0	9 ± 2.3	18 ± 1.5	22 ± 0.7	17 ± 0.7
10000.0	15 ± 2.4	29 ± 2.6	25 ± 2.1	20 ± 1.5
Trial Summary	Negative	Equivocal	Equivocal	Negative
Positive Control ²	153 ± 7.3	72 ± 11.6	73 ± 10.4	87 ± 6.0
Positive Control ³				
Positive Control ⁴				

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Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	3 ± 1.0	4 ± 0.7	4 ± 1.5	7 ± 0.3	8 ± 0.7
100.0	5 ± 0.7		5 ± 1.3		5 ± 1.5
333.0	3 ± 1.5	5 ± 0.9	4 ± 2.2	7 ± 1.9	6 ± 1.2
1000.0	6 ± 1.2	4 ± 1.0	6 ± 0.6	6 ± 1.5	3 ± 1.5
3333.0	7 ± 1.7	5 ± 2.3	5 ± 0.3	3 ± 1.7	6 ± 1.7
6000.0		4 ± 0.9		5 ± 1.2	
10000.0	5 ± 1.5	4 ± 2.4	5 ± 1.5	3 ± 0.3	6 ± 1.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					90 ± 5.9
Positive Control ³			40 ± 4.7	63 ± 4.6	
Positive Control ⁵	533 ± 50.4	170 ± 15.0			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	13 ± 1.2
100.0	
333.0	6 ± 0.9
1000.0	4 ± 0.3
3333.0	5 ± 1.8
6000.0	7 ± 1.8
10000.0	4 ± 1.2
Trial Summary	Negative
Positive Control ²	150 ± 7.9
Positive Control ³	
Positive Control ⁵	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	21 ± 0.3	14 ± 1.3	26 ± 2.1	32 ± 1.2	27 ± 5.8
100.0	16 ± 1.9		31 ± 1.9		33 ± 3.5
333.0	15 ± 2.4	15 ± 1.9	33 ± 2.7	35 ± 3.8	35 ± 2.6
1000.0	21 ± 4.3	18 ± 0.7	18 ± 0.6	23 ± 2.9	23 ± 3.1
3333.0	17 ± 2.6	15 ± 2.0	18 ± 2.5	19 ± 0.7	21 ± 4.1
6000.0		16 ± 0.6		17 ± 3.2	
10000.0	15 ± 2.6	19 ± 2.4	17 ± 1.9	14 ± 0.6	14 ± 2.3
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					1188 ± 25.7
Positive Control ³				474 ± 17.2	
Positive Control ⁶			472 ± 9.3		
Positive Control ⁷	1918 ± 36.0	1177 ± 83.3			

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	23 ± 4.6
100.0	
333.0	28 ± 1.8
1000.0	19 ± 2.1
3333.0	19 ± 2.1
6000.0	14 ± 2.9
10000.0	15 ± 1.2
Trial Summary	Negative
Positive Control ²	885 ± 82.5
Positive Control ³	
Positive Control ⁶	
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: Water

2: 0.75 ug/Plate 2-Aminoanthracene

3: 1.5 ug/Plate 2-Aminoanthracene

4: 2.5 ug/Plate Sodium Azide

5: 80.0 ug/Plate 9-Aminoacridine

6: 2.5 ug/Plate 2-Aminoanthracene

7: 12.0 ug/Plate 4-Nitro-O-Phenylenediamine

**** END OF REPORT ****