

Experiment Number: 484967

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: C.I. Direct blue 10

CAS Number: 4198-19-0

Date Report Requested: 09/11/2018

Time Report Requested: 22:16:57

**NTP Study Number:**

484967

**Study Result:**

Negative

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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 <sup>1</sup>	114 ± 1.5	98 ± 3.8	141 ± 3.8	137 ± 1.7	137 ± 3.3
100.0	105 ± 4.3	136 ± 13.3	145 ± 7.5	153 ± 6.8	134 ± 8.2
333.0	109 ± 10.0 <sup>P</sup>	135 ± 7.2 <sup>P</sup>	141 ± 5.7 <sup>P</sup>	140 ± 5.0 <sup>P</sup>	128 ± 6.1 <sup>P</sup>
1000.0	107 ± 13.4 <sup>P</sup>	109 ± 4.7 <sup>P</sup>	133 ± 5.0 <sup>P</sup>	141 ± 2.5 <sup>P</sup>	128 ± 3.5 <sup>P</sup>
3333.0	81 ± 8.5 <sup>P</sup>	115 ± 11.9 <sup>P</sup>	133 ± 1.2 <sup>P</sup>	139 ± 13.7 <sup>P</sup>	108 ± 15.0 <sup>P</sup>
10000.0	82 ± 1.2 <sup>P</sup>	98 ± 9.3 <sup>P</sup>	104 ± 3.2 <sup>P</sup>	133 ± 8.1 <sup>P</sup>	106 ± 6.7 <sup>P</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>	301 ± 4.0	405 ± 7.1			
Positive Control <sup>3</sup>			510 ± 10.1	885 ± 103.7	1921 ± 50.9

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**Strain: TA100**

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<b>Dose (ug/Plate)</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	143 ± 5.5
100.0	151 ± 6.1
333.0	149 ± 7.8 <sup>P</sup>
1000.0	149 ± 8.5 <sup>P</sup>
3333.0	135 ± 13.2 <sup>P</sup>
10000.0	106 ± 6.2 <sup>P</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	1065 ± 143.4

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## Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	19 ± 0.7	25 ± 3.8	5 ± 0.3	11 ± 1.5	9 ± 2.0
100.0	15 ± 2.4	30 ± 1.5	8 ± 2.8	6 ± 2.1	9 ± 1.8
333.0	22 ± 3.4 <sup>p</sup>	22 ± 2.6 <sup>p</sup>	7 ± 1.2 <sup>p</sup>	8 ± 0.6 <sup>p</sup>	9 ± 1.7 <sup>p</sup>
1000.0	20 ± 0.3 <sup>p</sup>	23 ± 2.5 <sup>p</sup>	11 ± 1.2 <sup>p</sup>	11 ± 0.9 <sup>p</sup>	5 ± 0.3 <sup>p</sup>
3333.0	14 ± 1.2 <sup>p</sup>	22 ± 2.7 <sup>p</sup>	8 ± 2.7 <sup>p</sup>	4 ± 0.6 <sup>p</sup>	6 ± 0.7 <sup>p</sup>
10000.0	14 ± 1.5 <sup>p</sup>	17 ± 0.9 <sup>p</sup>	7 ± 1.3 <sup>p</sup>	8 ± 0.3 <sup>p</sup>	7 ± 3.6 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>	311 ± 14.7	452 ± 12.8			
Positive Control <sup>4</sup>			133 ± 11.7	162 ± 11.8	388 ± 28.7

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**Strain: TA1535**

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<b>Dose (ug/Plate)</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	6 ± 1.3
100.0	8 ± 3.0
333.0	12 ± 2.1 <sup>P</sup>
1000.0	8 ± 2.2 <sup>P</sup>
3333.0	8 ± 1.8 <sup>P</sup>
10000.0	8 ± 1.5 <sup>P</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>4</sup>	437 ± 22.8

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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 <sup>1</sup>	4 ± 2.0	3 ± 1.3	4 ± 0.7	9 ± 2.2	7 ± 1.7
100.0	3 ± 0.7	8 ± 0.9	7 ± 2.1	7 ± 1.5	6 ± 1.2
333.0	6 ± 1.2 <sup>p</sup>	5 ± 0.6 <sup>p</sup>	9 ± 1.8 <sup>p</sup>	12 ± 0.9 <sup>p</sup>	8 ± 1.0 <sup>p</sup>
1000.0	7 ± 1.7 <sup>p</sup>	5 ± 1.2 <sup>p</sup>	8 ± 0.9 <sup>p</sup>	10 ± 1.2 <sup>p</sup>	7 ± 2.5 <sup>p</sup>
3333.0	3 ± 1.2 <sup>p</sup>	5 ± 1.3 <sup>p</sup>	4 ± 1.5 <sup>p</sup>	9 ± 1.7 <sup>p</sup>	6 ± 1.0 <sup>p</sup>
10000.0	2 ± 0.3 <sup>p</sup>	4 ± 0.9 <sup>p</sup>	4 ± 0.9 <sup>p</sup>	4 ± 1.2 <sup>p</sup>	3 ± 0.9 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>4</sup>			119 ± 10.5	116 ± 23.4	363 ± 4.0
Positive Control <sup>5</sup>	201 ± 24.8	149 ± 27.8			

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**Strain: TA1537**

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<b>Dose (ug/Plate)</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	7 ± 1.9
100.0	5 ± 1.2
333.0	8 ± 1.2 <sup>p</sup>
1000.0	9 ± 1.8 <sup>p</sup>
3333.0	7 ± 0.9 <sup>p</sup>
10000.0	6 ± 1.2 <sup>p</sup>
Trial Summary	Negative
Positive Control <sup>4</sup>	409 ± 14.9
Positive Control <sup>5</sup>	

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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 <sup>1</sup>	16 ± 1.7	16 ± 0.7	25 ± 4.0	24 ± 3.9	30 ± 0.9
100.0	13 ± 2.6	15 ± 2.2	30 ± 2.3	30 ± 2.8	26 ± 2.6
333.0	11 ± 1.3 <sup>p</sup>	18 ± 3.5 <sup>p</sup>	29 ± 3.5 <sup>p</sup>	32 ± 0.3 <sup>p</sup>	24 ± 2.5 <sup>p</sup>
1000.0	15 ± 0.3 <sup>p</sup>	13 ± 0.6 <sup>p</sup>	29 ± 1.2 <sup>p</sup>	36 ± 0.9 <sup>p</sup>	27 ± 1.0 <sup>p</sup>
3333.0	14 ± 1.0 <sup>p</sup>	13 ± 2.6 <sup>p</sup>	28 ± 4.3 <sup>p</sup>	36 ± 2.8 <sup>p</sup>	30 ± 3.0 <sup>p</sup>
10000.0	2 ± 0.3 <sup>p</sup>	16 ± 1.5 <sup>p</sup>	22 ± 3.5 <sup>p</sup>	25 ± 3.3 <sup>p</sup>	16 ± 1.5 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Equivocal	Negative
Positive Control <sup>3</sup>			365 ± 39.1	414 ± 16.7	1089 ± 27.5
Positive Control <sup>6</sup>	653 ± 29.5	830 ± 6.0			



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**Strain: TA98**

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<b>Dose (ug/Plate)</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	31 ± 0.0
100.0	34 ± 2.9
333.0	31 ± 2.5 <sup>p</sup>
1000.0	37 ± 0.6 <sup>p</sup>
3333.0	31 ± 0.9 <sup>p</sup>
10000.0	15 ± 3.2 <sup>p</sup>
Trial Summary	Negative
Positive Control <sup>3</sup>	827 ± 37.4
Positive Control <sup>6</sup>	

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### **LEGEND**

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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: 1.0 ug/Plate Sodium Azide

3: 1.0 ug/Plate 2-Aminoanthracene

4: 2.5 ug/Plate 2-Aminoanthracene

5: 50.0 ug/Plate 9-Aminoacridine

6: 5.0 ug/Plate 4-Nitro-O-Phenylenediamine

p: Precipitate

**\*\* END OF REPORT \*\***