

Experiment Number: 373757

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

**G06: Ames Summary Data**

Test Compound: **HC blue 2**

CAS Number: **33229-34-4**

Date Report Requested: **09/14/2018**

Time Report Requested: **02:52:39**

**NTP Study Number:**

373757

**Study Result:**

Positive

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Mutagenicity

## G06: Ames Summary Data

Test Compound: HC blue 2

CAS Number: 33229-34-4

Date Report Requested: 09/14/2018

Time Report Requested: 02:52:39

## 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>	101 ± 3.9	138 ± 13.2	124 ± 7.0	152 ± 7.3	97 ± 12.0
100.0	90 ± 7.5		135 ± 18.7		113 ± 6.6
333.0	110 ± 9.1	104 ± 7.8	118 ± 3.8	151 ± 8.6	112 ± 8.2
1000.0	105 ± 6.1	128 ± 8.2	125 ± 8.4	152 ± 6.7	124 ± 4.8
3333.0	144 ± 1.5	133 ± 6.5	134 ± 7.1	149 ± 7.9	128 ± 6.6
6666.0		137 ± 6.8		165 ± 3.2	
10000.0	115 ± 14.5	123 ± 12.2	162 ± 15.1	158 ± 4.4	163 ± 19.2
Trial Summary	Equivocal	Negative	Equivocal	Negative	Equivocal
Positive Control <sup>2</sup>			1260 ± 14.2	864 ± 9.3	1649 ± 10.3
Positive Control <sup>3</sup>	558 ± 19.2	669 ± 12.7			

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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>	153 ± 6.1
100.0	
333.0	154 ± 6.7
1000.0	155 ± 3.5
3333.0	159 ± 9.6
6666.0	160 ± 17.6
10000.0	149 ± 17.0
Trial Summary	Negative
Positive Control <sup>2</sup>	2422 ± 50.8
Positive Control <sup>3</sup>	

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**G06: Ames Summary Data**

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Test Type: **Genetic Toxicology - Bacterial  
Mutagenicity**Test Compound: **HC blue 2**

Time Report Requested: 02:52:39

**Strain: TA1535**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>With 5% Rat S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>	<b>With 30% Rat S9</b>
Vehicle Control <sup>1</sup>	21 ± 3.8	9 ± 1.5	6 ± 0.0	10 ± 2.2	17 ± 2.0
100.0	28 ± 5.4		11 ± 1.8		
333.0	24 ± 4.3	9 ± 2.2	8 ± 0.3	7 ± 1.2	12 ± 2.0
1000.0	28 ± 1.5	8 ± 1.5	10 ± 2.2	7 ± 1.2	14 ± 0.3
3333.0	16 ± 5.2	15 ± 2.3	17 ± 2.9	9 ± 2.6	15 ± 0.9
6666.0		15 ± 0.9		10 ± 1.2	12 ± 1.3
10000.0	25 ± 2.0	14 ± 1.5	18 ± 4.5	8 ± 3.2	13 ± 2.1
Trial Summary	Negative	Negative	Equivocal	Negative	Negative
Positive Control <sup>3</sup>	485 ± 17.1				
Positive Control <sup>4</sup>		176 ± 8.0	281 ± 3.8	156 ± 11.3	155 ± 3.5

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Test Compound: HC blue 2

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Strain: TA1535

Dose (ug/Plate)	With 5% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	10 ± 0.9	7 ± 1.0	13 ± 1.8	8 ± 1.5
100.0		15 ± 3.5		
333.0	12 ± 3.1	6 ± 1.0	12 ± 0.3	9 ± 0.6
1000.0	15 ± 1.5	10 ± 1.9	11 ± 2.5	11 ± 1.5
3333.0	15 ± 2.2	17 ± 5.2	12 ± 2.2	11 ± 0.3
6666.0	25 ± 4.3		12 ± 2.3	12 ± 3.3
10000.0	17 ± 2.6	27 ± 4.1	10 ± 2.0	12 ± 1.2
Trial Summary	Equivocal	Equivocal	Negative	Negative
Positive Control <sup>3</sup>				
Positive Control <sup>4</sup>	292 ± 7.9	407 ± 16.7	168 ± 5.8	132 ± 4.5

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Strain: TA1537

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	7 ± 1.0	7 ± 1.3	8 ± 1.9
100.0	8 ± 2.0	6 ± 1.7	10 ± 0.9
333.0	7 ± 1.2	5 ± 0.9	7 ± 0.7
1000.0	11 ± 1.0	10 ± 1.2	7 ± 0.3
3333.0	17 ± 1.7	14 ± 1.2	15 ± 2.7
10000.0	29 ± 2.6	25 ± 1.8	23 ± 0.9
Trial Summary	Weakly Positive	Weakly Positive	Equivocal
Positive Control <sup>4</sup>		221 ± 10.7	275 ± 25.2
Positive Control <sup>5</sup>	567 ± 108.0		

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## Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 5% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control <sup>1</sup>	149 ± 11.8	151 ± 4.6	172 ± 2.0	179 ± 11.0	165 ± 6.5
100.0	144 ± 5.8			171 ± 8.6	
333.0	147 ± 4.4	137 ± 5.5	180 ± 2.7	168 ± 5.0	167 ± 0.9
1000.0	166 ± 2.7	149 ± 4.4	183 ± 3.2	190 ± 11.0	160 ± 10.9
3333.0	205 ± 8.1	194 ± 4.9	184 ± 1.5	172 ± 11.2	156 ± 3.2
6666.0		218 ± 8.5	201 ± 3.7		179 ± 8.0
10000.0	228 ± 11.3	242 ± 15.8	198 ± 12.4	223 ± 4.4	194 ± 12.3
Trial Summary	Weakly Positive	Weakly Positive	Negative	Equivocal	Negative
Positive Control <sup>4</sup>			2234 ± 83.6	1070 ± 28.0	1315 ± 10.7
Positive Control <sup>5</sup>	1931 ± 109.1	1272 ± 56.1			

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Strain: TA97

Dose (ug/Plate)	With 30% Rat S9	With 5% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	181 ± 3.9	156 ± 5.5	160 ± 6.4	156 ± 7.2	176 ± 16.8
100.0			167 ± 5.5		
333.0	201 ± 8.6	170 ± 5.3	167 ± 5.5	149 ± 16.7	187 ± 6.4
1000.0	200 ± 9.5	182 ± 7.1	183 ± 19.1	168 ± 9.2	200 ± 7.4
3333.0	211 ± 4.7	210 ± 10.0	182 ± 7.6	180 ± 3.2	215 ± 4.8
6666.0	194 ± 14.6	268 ± 5.9		219 ± 10.7	205 ± 9.3
10000.0	220 ± 10.0	318 ± 2.6	240 ± 15.2	231 ± 16.1	258 ± 6.9
Trial Summary	Negative	Positive	Equivocal	Weakly Positive	Equivocal
Positive Control <sup>4</sup>	558 ± 19.4	2335 ± 60.1	1346 ± 93.5	1338 ± 10.8	1421 ± 19.3
Positive Control <sup>5</sup>					



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Strain: TA97

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	151 ± 4.6
100.0	
333.0	156 ± 4.0
1000.0	211 ± 4.9
3333.0	221 ± 2.8
6666.0	213 ± 11.5
10000.0	175 ± 87.8
Trial Summary	Weakly Positive
Positive Control <sup>4</sup>	1302 ± 28.0
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>	17 ± 2.6	15 ± 0.3	33 ± 4.6	31 ± 4.6	25 ± 5.1
100.0	17 ± 2.3		56 ± 4.7		40 ± 3.3
333.0	20 ± 3.2	14 ± 1.0	55 ± 3.8	51 ± 2.2	56 ± 9.0
1000.0	32 ± 4.0	25 ± 3.2	45 ± 4.5	41 ± 3.2	60 ± 3.8
3333.0	73 ± 7.0	43 ± 3.6	51 ± 1.9	44 ± 2.8	59 ± 3.7
6666.0		62 ± 2.6		63 ± 3.4	
10000.0	127 ± 25.2	66 ± 4.0	138 ± 3.5	157 ± 11.0	122 ± 2.7
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control <sup>2</sup>			843 ± 21.7	461 ± 32.8	1029 ± 20.0
Positive Control <sup>6</sup>	1278 ± 52.0	1545 ± 58.8			

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Strain: TA98

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Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control <sup>1</sup>	35 ± 4.7
100.0	
333.0	38 ± 4.6
1000.0	52 ± 4.2
3333.0	61 ± 2.3
6666.0	82 ± 4.4
10000.0	93 ± 4.9
Trial Summary	Positive
Positive Control <sup>2</sup>	1693 ± 39.7
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: Dimethyl Sulfoxide

2: 1.0 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate Sodium Azide

4: 2.5 ug/Plate 2-Aminoanthracene

5: 50.0 ug/Plate 9-Aminoacridine

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

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