

Experiment Number: 390759

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

**G06: Ames Summary Data**

Test Compound: **Vat blue 20**

CAS Number: **116-71-2**

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

Time Report Requested: **10:11:18**

**NTP Study Number:**

390759

**Study Result:**

Weakly Positive

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## G06: Ames Summary Data

Date Report Requested: 09/14/2018

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

Test Compound: Vat blue 20

Time Report Requested: 10:11:18

CAS Number: 116-71-2

## Strain: TA100

Dose (ug/Plate)	Without S9	With 5% Rat S9	With 5% Rat S9	With 5% Rat S9	With 5% Rat S9
Vehicle Control <sup>1</sup>	102 ± 7.5	118 ± 5.7	126 ± 6.0	162 ± 6.6	159 ± 3.2
33.0					173 ± 4.9
100.0	117 ± 4.8	139 ± 5.5	107 ± 15.6	174 ± 6.7	176 ± 4.6
166.0					206 ± 12.2
333.0	103 ± 7.6	178 ± 8.8	135 ± 16.3	188 ± 2.6	190 ± 2.4
666.0			127 ± 2.0	202 ± 3.1	224 ± 17.3
1000.0	106 ± 8.4	169 ± 3.8	139 ± 10.3	183 ± 8.5	230 ± 10.8
1666.0			121 ± 6.9	151 ± 6.2	183 ± 13.5
3333.0	123 ± 13.7	116 ± 3.2	126 ± 2.3	142 ± 6.4	163 ± 3.8 <sup>P</sup>
6666.0		77 ± 4.4 <sup>P</sup>	115 ± 8.4 <sup>P</sup>	139 ± 8.8 <sup>P</sup>	
10000.0	64 ± 12.7 <sup>P</sup>				
Trial Summary	Negative	Weakly Positive	Negative	Equivocal	Equivocal
Positive Control <sup>2</sup>		819 ± 36.4	800 ± 23.3	610 ± 15.9	907 ± 76.7
Positive Control <sup>3</sup>	354 ± 30.3				
Positive Control <sup>4</sup>					

Experiment Number: 390759

**G06: Ames Summary Data**

Date Report Requested: 09/14/2018

Test Type: **Genetic Toxicology - Bacterial Mutagenicity**Test Compound: **Vat blue 20**

Time Report Requested: 10:11:18

**Strain: TA100**

<b>Dose (ug/Plate)</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Rat S9</b>
Vehicle Control <sup>1</sup>	90 ± 1.9	156 ± 5.9	114 ± 5.2	134 ± 10.7	158 ± 10.1
33.0		124 ± 1.5			154 ± 7.5
100.0	127 ± 4.8	145 ± 12.7	130 ± 4.9	168 ± 15.5	147 ± 8.7
166.0					196 ± 29.2
333.0	144 ± 14.1	134 ± 24.9	127 ± 11.6	195 ± 6.2	164 ± 7.1
666.0		148 ± 21.4	131 ± 7.4	235 ± 7.2	206 ± 12.5
1000.0	190 ± 5.0	151 ± 13.8	142 ± 9.2	227 ± 13.6	206 ± 11.9
1666.0		142 ± 14.4	152 ± 2.0	196 ± 8.6	215 ± 30.3
3333.0	128 ± 7.1		117 ± 7.8	208 ± 5.5	162 ± 5.4
6666.0	91 ± 6.6 <sup>P</sup>		98 ± 7.1 <sup>P</sup>	166 ± 1.2 <sup>P</sup>	
10000.0					
Trial Summary	Positive	Negative	Equivocal	Weakly Positive	Equivocal
Positive Control <sup>2</sup>	542 ± 28.5	528 ± 21.0	479 ± 26.3	405 ± 30.9	425 ± 22.5
Positive Control <sup>3</sup>					
Positive Control <sup>4</sup>					

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Test Compound: Vat blue 20

CAS Number: 116-71-2

Date Report Requested: 09/14/2018

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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 30% Rat S9
Vehicle Control <sup>1</sup>	147 ± 16.3	114 ± 1.8	128 ± 13.0	159 ± 10.5	129 ± 4.1
33.0					
100.0	153 ± 7.1	144 ± 7.4	138 ± 12.7	193 ± 10.3	137 ± 10.7
166.0					
333.0	167 ± 7.9	147 ± 11.5	116 ± 4.6	182 ± 9.5	182 ± 4.3
666.0			119 ± 7.3		172 ± 17.8
1000.0	204 ± 6.5	151 ± 6.5	140 ± 5.0	198 ± 1.5	186 ± 11.7
1666.0			125 ± 6.7	213 ± 22.5	214 ± 9.6
3333.0	214 ± 8.7	193 ± 13.2	123 ± 10.4	194 ± 3.5	138 ± 17.6
6666.0		105 ± 11.8 <sup>P</sup>	104 ± 11.7 <sup>P</sup>		139 ± 8.2 <sup>P</sup>
10000.0	103 ± 3.3 <sup>P</sup>				
Trial Summary	Weakly Positive	Weakly Positive	Negative	Equivocal	Weakly Positive
Positive Control <sup>2</sup>					
Positive Control <sup>3</sup>					
Positive Control <sup>4</sup>	547 ± 36.3	570 ± 18.8	553 ± 50.5	475 ± 17.8	587 ± 16.2

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Strain: TA100

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Dose (ug/Plate)	With 30% Rat S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	184 ± 21.3	168 ± 7.4
33.0	198 ± 6.6	
100.0	184 ± 9.3	164 ± 7.6
166.0	175 ± 5.5	
333.0	183 ± 12.5	169 ± 13.7
666.0	207 ± 8.8	
1000.0	235 ± 7.3	164 ± 3.6
1666.0	260 ± 11.8	
3333.0	256 ± 10.0	172 ± 12.6
6666.0		
10000.0		114 ± 8.1 <sup>P</sup>
Trial Summary	Equivocal	Negative
Positive Control <sup>2</sup>		593 ± 18.9
Positive Control <sup>3</sup>		
Positive Control <sup>4</sup>	576 ± 43.1	

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Test Compound: Vat blue 20

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## Strain: TA1535

Dose (ug/Plate)	Without S9	With 5% Rat S9	With 5% Rat S9	With 5% Rat S9	With 10% Rat S9
Vehicle Control <sup>1</sup>	15 ± 2.4	12 ± 1.5	9 ± 1.5	9 ± 0.9	14 ± 1.2
66.0				9 ± 0.7	
100.0	17 ± 0.9	12 ± 1.9			9 ± 1.5
333.0	17 ± 2.3	12 ± 1.5			12 ± 2.1
666.0		11 ± 0.6	14 ± 2.3		10 ± 2.0
1000.0	17 ± 1.8	7 ± 0.7	15 ± 0.9	10 ± 2.7	11 ± 1.5
1666.0		13 ± 1.5	19 ± 2.3	18 ± 3.0	13 ± 2.3
3333.0	10 ± 0.6	18 ± 2.6	24 ± 2.6	22 ± 2.3	11 ± 1.8
6666.0	14 ± 3.1 <sup>p</sup>	25 ± 5.0 <sup>p</sup>	26 ± 0.6 <sup>p</sup>	24 ± 2.0 <sup>p</sup>	16 ± 3.2 <sup>p</sup>
Trial Summary	Negative	Equivocal	Positive	Weakly Positive	Negative
Positive Control <sup>3</sup>	300 ± 15.6				
Positive Control <sup>4</sup>		150 ± 8.1	163 ± 4.9	127 ± 11.0	118 ± 25.5
Positive Control <sup>5</sup>					

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Strain: TA1535

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	17 ± 2.2	13 ± 2.7	15 ± 4.4
66.0			
100.0	17 ± 1.3	17 ± 4.2	18 ± 0.3
333.0	18 ± 1.3	18 ± 0.9	12 ± 1.5
666.0	15 ± 1.0		
1000.0	13 ± 1.7	16 ± 3.0	9 ± 1.9
1666.0	13 ± 1.9		
3333.0	9 ± 1.2	15 ± 1.2	10 ± 2.6
6666.0	11 ± 2.5 <sup>p</sup>	11 ± 2.0	9 ± 1.5 <sup>p</sup>
Trial Summary	Negative	Negative	Negative
Positive Control <sup>3</sup>			
Positive Control <sup>4</sup>			484 ± 20.7
Positive Control <sup>5</sup>	85 ± 8.6	123 ± 12.2	

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Strain: TA97

Dose (ug/Plate)	Without S9	With 5% Rat S9	With 5% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control <sup>1</sup>	146 ± 7.1	173 ± 16.2	184 ± 6.4	173 ± 11.8	158 ± 2.0
33.0		184 ± 10.1	198 ± 11.5	207 ± 6.0	200 ± 5.5
100.0	148 ± 1.2	194 ± 14.8	216 ± 4.6	223 ± 8.7	199 ± 6.1
333.0	146 ± 4.8	237 ± 12.5	231 ± 7.2	259 ± 7.6	206 ± 12.0
666.0			217 ± 11.3		269 ± 14.8
1000.0	157 ± 12.8	211 ± 10.5	225 ± 5.5	232 ± 16.4	260 ± 5.3
3333.0	154 ± 7.3	164 ± 5.8		154 ± 3.2	
6666.0	138 ± 2.9 <sup>p</sup>				
Trial Summary	Negative	Equivocal	Equivocal	Weakly Positive	Weakly Positive
Positive Control <sup>6</sup>					
Positive Control <sup>2</sup>		423 ± 10.5	392 ± 26.8	348 ± 13.1	338 ± 9.1
Positive Control <sup>4</sup>					
Positive Control <sup>7</sup>	464 ± 30.9				



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## Strain: TA97

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 5% Hamster S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	158 ± 3.2	173 ± 21.4	177 ± 17.1	146 ± 3.5	175 ± 5.2
33.0		189 ± 11.9	188 ± 13.3	194 ± 9.5	134 ± 14.1
100.0	207 ± 3.3	229 ± 1.5	207 ± 8.5	220 ± 3.0	151 ± 11.1
333.0	252 ± 5.0	231 ± 2.4	237 ± 7.5	209 ± 9.0	204 ± 8.0
666.0			262 ± 8.1		
1000.0	277 ± 15.1	271 ± 6.4	254 ± 5.9	181 ± 4.2	196 ± 5.1
3333.0	290 ± 14.4	272 ± 2.0		157 ± 16.2	176 ± 8.4
6666.0	218 ± 9.4 <sup>p</sup>				
Trial Summary	Weakly Positive	Weakly Positive	Equivocal	Equivocal	Negative
Positive Control <sup>6</sup>				668 ± 14.4	427 ± 34.7
Positive Control <sup>2</sup>					
Positive Control <sup>4</sup>	335 ± 11.0	352 ± 8.7	325 ± 14.9		
Positive Control <sup>7</sup>					

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Strain: TA97

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Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	144 ± 2.7	209 ± 17.3
33.0		205 ± 17.2
100.0	193 ± 17.2	243 ± 4.8
333.0	215 ± 17.3	223 ± 13.0
666.0		
1000.0	158 ± 27.8	204 ± 9.4
3333.0	176 ± 18.0	194 ± 30.6
6666.0	119 ± 22.8 <sup>p</sup>	
Trial Summary	Equivocal	Negative
Positive Control <sup>6</sup>		
Positive Control <sup>2</sup>	342 ± 6.8	361 ± 22.5
Positive Control <sup>4</sup>		
Positive Control <sup>7</sup>		

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Strain: TA98

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	18 ± 1.2	30 ± 4.3	25 ± 2.6
100.0	19 ± 6.2	25 ± 6.0	25 ± 2.0
333.0	15 ± 1.5	29 ± 2.4	24 ± 2.6
1000.0	22 ± 1.5	36 ± 4.3	33 ± 2.3
3333.0	16 ± 0.6	39 ± 0.9	26 ± 4.8
10000.0	5 ± 1.9 <sup>p</sup>	18 ± 0.6 <sup>p</sup>	18 ± 1.0 <sup>p</sup>
Trial Summary	Negative	Negative	Negative
Positive Control <sup>2</sup>		163 ± 9.8	441 ± 26.6
Positive Control <sup>8</sup>	574 ± 7.3		

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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 2-Aminoanthracene

3: 1.0 ug/Plate Sodium Azide

4: 2.5 ug/Plate 2-Aminoanthracene

5: 5.0 ug/Plate 2-Aminoanthracene

6: 0.5 ug/Plate 2-Aminoanthracene

7: 50.0 ug/Plate 9-Aminoacridine

8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

p: Precipitate

\*\* END OF REPORT \*\*