

Experiment Number: 799224

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

**G06: Ames Summary Data**

Test Compound: **Glyoxal**

CAS Number: **107-22-2**

Date Report Requested: **09/15/2018**

Time Report Requested: **08:33:17**

**NTP Study Number:**

799224

**Study Result:**

Positive

Experiment Number: 799224

## G06: Ames Summary Data

Date Report Requested: 09/15/2018

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

Test Compound: Glyoxal

Time Report Requested: 08:33:17

## Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 30% Rat S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	92 ± 5.8	81 ± 0.7	121 ± 2.6	127 ± 4.9	91 ± 10.4
10.0	111 ± 12.1	100 ± 9.4			
33.0	131 ± 1.7	214 ± 81.2			
100.0	403 ± 25.5	268 ± 71.2	149 ± 5.5	157 ± 1.5	109 ± 7.5
200.0	1498 ± 56.6	1217 ± 45.3			
333.0	2614 ± 31.1	1560 ± 193.5	362 ± 14.0	292 ± 15.4	191 ± 12.7
667.0			954 ± 68.7	831 ± 114.5	538 ± 18.0
750.0			1093 ± 49.8	718 ± 80.3	619 ± 31.3
1000.0			1553 ± 226.7	1155 ± 44.0	1050 ± 17.3
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control <sup>2</sup>	664 ± 32.9	387 ± 18.1			
Positive Control <sup>3</sup>					695 ± 15.9
Positive Control <sup>4</sup>			979 ± 8.1	1124 ± 5.0	

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Strain: TA100

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	115 ± 3.7
10.0	
33.0	
100.0	151 ± 14.5
200.0	
333.0	486 ± 240.9
667.0	575 ± 81.2
750.0	898 ± 103.6
1000.0	1159 ± 132.0
Trial Summary	Positive
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	713 ± 90.5
Positive Control <sup>4</sup>	

Experiment Number: 799224

**G06: Ames Summary Data**

Date Report Requested: 09/15/2018

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

Time Report Requested: 08:33:17

CAS Number: 107-22-2

**Strain: TA98**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 30% Rat S9</b>	<b>With 30% Rat S9</b>	<b>With 30% Rat S9</b>
Vehicle Control <sup>1</sup>	15 ± 3.9	17 ± 2.6	24 ± 3.2	48 ± 1.2	24 ± 3.2
10.0	21 ± 3.3				
33.0	17 ± 0.3	16 ± 4.6			
100.0	21 ± 0.3	19 ± 0.9	25 ± 1.2	38 ± 1.8	26 ± 2.2
200.0	32 ± 1.5	23 ± 3.3			
333.0	49 ± 0.3	43 ± 2.5	34 ± 3.2	43 ± 4.3	31 ± 1.0
500.0		65 ± 15.3			
667.0			56 ± 4.0	55 ± 6.2	30 ± 5.3
750.0			57 ± 5.7		
1000.0			81 ± 10.7	49 ± 2.9	72 ± 4.7
2000.0				33 ± 2.6 <sup>s</sup>	32 ± 2.0 <sup>s</sup>
Trial Summary	Positive	Positive	Positive	Negative	Equivocal
Positive Control <sup>3</sup>			522 ± 22.2	397 ± 37.4	387 ± 13.6
Positive Control <sup>5</sup>	374 ± 4.5	427 ± 12.3			

Experiment Number: 799224

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: Glyoxal  
CAS Number: 107-22-2

Date Report Requested: 09/15/2018

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**Strain: TA98**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	22 ± 3.7	21 ± 1.7
10.0		
33.0		
100.0	19 ± 1.9	22 ± 3.5
200.0		
333.0	25 ± 1.3	28 ± 9.3
500.0		
667.0	34 ± 1.0	33 ± 9.4
750.0	37 ± 2.7	
1000.0	54 ± 3.0	43 ± 8.0
2000.0		23 ± 4.6 <sup>s</sup>
Trial Summary	Positive	Equivocal
Positive Control <sup>3</sup>	697 ± 37.9	483 ± 23.8
Positive Control <sup>5</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: 0.5 ug/Plate Sodium Azide

3: 1.0 ug/Plate 2-Aminoanthracene

4: 2.0 ug/Plate 2-Aminoanthracene

5: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

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