

Experiment Number: 497788

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: 3,3'-Dimethylbenzidine dihydrochloride

CAS Number: 612-82-8

Date Report Requested: 09/12/2018

Time Report Requested: 04:40:29

**NTP Study Number:**

497788

**Study Result:**

Positive

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**Strain: TA100**

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<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	103 ± 4.6	102 ± 6.2	86 ± 0.5
10.0	87 ± 6.4	116 ± 7.7	87 ± 5.2
33.0	90 ± 3.5	118 ± 1.7	106 ± 3.8
100.0	95 ± 7.5	116 ± 4.8	118 ± 10.9
333.0	91 ± 2.0	105 ± 3.6	118 ± 0.9
666.0	86 ± 2.6 <sup>s</sup>	118 ± 8.5 <sup>s</sup>	114 ± 7.4 <sup>s</sup>
Trial Summary	Negative	Negative	Equivocal
Positive Control <sup>2</sup>			305 ± 6.5
Positive Control <sup>3</sup>	474 ± 26.2		
Positive Control <sup>4</sup>		733 ± 9.3	

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**Strain: TA1535**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	17 ± 3.7	9 ± 1.5	8 ± 0.7
10.0	16 ± 2.0	6 ± 1.5	6 ± 1.2
33.0	15 ± 1.7	13 ± 1.8	6 ± 2.7
100.0	12 ± 1.5	9 ± 1.5	9 ± 1.5
333.0	14 ± 1.5	7 ± 1.8	8 ± 0.7
666.0	6 ± 0.3 <sup>s</sup>	8 ± 1.0 <sup>s</sup>	8 ± 2.4 <sup>s</sup>
Trial Summary	Negative	Negative	Negative
Positive Control <sup>2</sup>			43 ± 1.3
Positive Control <sup>3</sup>	209 ± 6.4		
Positive Control <sup>5</sup>		169 ± 11.3	

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**Strain: TA97**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	86 ± 6.2	133 ± 1.6	116 ± 3.8
10.0	91 ± 3.3	176 ± 1.0	114 ± 1.2
33.0	91 ± 3.0	130 ± 2.6	119 ± 6.8
100.0	88 ± 9.5	142 ± 8.5	124 ± 10.6
333.0	71 ± 5.9	121 ± 9.0	122 ± 8.4
666.0	52 ± 4.6 <sup>s</sup>	110 ± 9.4 <sup>s</sup>	101 ± 3.5 <sup>s</sup>
Trial Summary	Negative	Negative	Negative
Positive Control <sup>2</sup>			228 ± 11.5
Positive Control <sup>5</sup>		1178 ± 49.5	
Positive Control <sup>6</sup>	461 ± 33.3		

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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>	13 ± 3.7	18 ± 2.9	28 ± 3.8	30 ± 7.1	25 ± 3.5
10.0	12 ± 1.7	15 ± 2.5	72 ± 2.6	64 ± 1.9	50 ± 1.5
33.0	13 ± 3.2	15 ± 2.3	87 ± 8.9	92 ± 3.7	61 ± 4.0
100.0	12 ± 2.9	17 ± 1.2	110 ± 1.7	101 ± 4.4	78 ± 3.2
333.0	15 ± 0.3 <sup>s</sup>	13 ± 2.3	107 ± 6.6	100 ± 8.8	101 ± 1.7
666.0	13 ± 1.3 <sup>s</sup>	10 ± 3.4 <sup>s</sup>	112 ± 4.0 <sup>s</sup>	97 ± 2.7 <sup>s</sup>	147 ± 15.6 <sup>s</sup>
Trial Summary	Negative	Negative	Positive	Positive	Positive
Positive Control <sup>7</sup>					166 ± 6.5
Positive Control <sup>2</sup>			217 ± 11.4	286 ± 28.9	
Positive Control <sup>8</sup>	177 ± 10.6	145 ± 3.4			

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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>	29 ± 0.3
10.0	59 ± 0.9
33.0	74 ± 2.6
100.0	88 ± 7.3
333.0	133 ± 1.7
666.0	163 ± 15.9 <sup>s</sup>
Trial Summary	Positive
Positive Control <sup>7</sup>	225 ± 7.8
Positive Control <sup>2</sup>	
Positive Control <sup>8</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: 0.4 ug/Plate 2-Aminoanthracene

3: 0.5 ug/Plate Sodium Azide

4: 0.75 ug/Plate 2-Aminoanthracene

5: 2.0 ug/Plate 2-Aminoanthracene

6: 3.5 ug/Plate 9-Aminoacridine

7: 0.2 ug/Plate 2-Aminoanthracene

8: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

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