

Experiment Number: 388115

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

**G06: Ames Summary Data**

Test Compound: **2,2'-Dimethylbenzidine hydrochloride**

CAS Number: **96196-27-9**

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

Time Report Requested: **09:44:41**

**NTP Study Number:**

388115

**Study Result:**

Positive

Experiment Number: 388115

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Mutagenicity

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CAS Number: 96196-27-9

Date Report Requested: 09/14/2018

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## 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>  | 128 ± 14.5            | 161 ± 6.4              | 163 ± 5.3       | 199 ± 11.3      | 141 ± 8.9           |
| 10.0                          |                       | 165 ± 5.9              | 281 ± 3.5       | 356 ± 19.6      | 351 ± 7.9           |
| 33.0                          | 139 ± 6.2             | 143 ± 10.1             | 358 ± 40.6      | 524 ± 7.8       | 1231 ± 20.6         |
| 100.0                         | 113 ± 10.7            | 160 ± 4.5              | 604 ± 17.7      | 937 ± 83.1      | 2276 ± 154.2        |
| 333.0                         | 142 ± 4.5             | 183 ± 5.8              | 1137 ± 14.8     | 1242 ± 49.0     | 2402 ± 79.3         |
| 1000.0                        | 95 ± 7.4 <sup>s</sup> | 100 ± 9.5 <sup>s</sup> | 1379 ± 55.2     | 1651 ± 130.2    | 2430 ± 143.4        |
| 2000.0                        | 81 ± 8.1 <sup>s</sup> |                        |                 |                 |                     |
| Trial Summary                 | Negative              | Negative               | Positive        | Positive        | Positive            |
| Positive Control <sup>2</sup> | 587 ± 9.9             | 333 ± 13.5             |                 |                 |                     |
| Positive Control <sup>3</sup> |                       |                        |                 |                 | 626 ± 17.8          |
| Positive Control <sup>4</sup> |                       |                        | 941 ± 35.5      | 741 ± 40.9      |                     |

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**Strain: TA100**

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| <b>Dose (ug/Plate)</b>        | <b>With 30% Hamster S9</b> |
|-------------------------------|----------------------------|
| Vehicle Control <sup>1</sup>  | 171 ± 7.7                  |
| 10.0                          | 356 ± 16.3                 |
| 33.0                          | 880 ± 19.3                 |
| 100.0                         | 1685 ± 75.3                |
| 333.0                         | 1979 ± 170.1               |
| 1000.0                        | 1751 ± 145.2               |
| 2000.0                        |                            |
| Trial Summary                 | Positive                   |
| Positive Control <sup>2</sup> |                            |
| Positive Control <sup>3</sup> | 922 ± 124.1                |
| Positive Control <sup>4</sup> |                            |

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Test Compound: 2,2'-Dimethylbenzidine hydrochloride

CAS Number: 96196-27-9

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Time Report Requested: 09:44:41

## Strain: TA98

| Dose (ug/Plate)               | Without S9           | Without S9           | With 30% Rat S9 | With 30% Rat S9 | With 30% Hamster S9 |
|-------------------------------|----------------------|----------------------|-----------------|-----------------|---------------------|
| Vehicle Control <sup>1</sup>  | 19 ± 0.6             | 14 ± 3.0             | 38 ± 1.2        | 30 ± 4.2        | 31 ± 4.5            |
| 10.0                          |                      | 16 ± 1.5             | 38 ± 5.4        | 33 ± 3.5        | 41 ± 6.1            |
| 33.0                          | 24 ± 3.0             | 14 ± 1.8             | 49 ± 4.0        | 52 ± 7.1        | 90 ± 5.9            |
| 100.0                         | 17 ± 1.5             | 17 ± 2.3             | 67 ± 10.1       | 67 ± 5.0        | 252 ± 9.6           |
| 333.0                         | 19 ± 0.9             | 21 ± 0.9             | 102 ± 4.5       | 107 ± 4.2       | 592 ± 63.4          |
| 1000.0                        | 5 ± 2.9 <sup>s</sup> | 1 ± 0.9 <sup>s</sup> | 161 ± 28.2      | 145 ± 12.5      | 1228 ± 59.2         |
| 2000.0                        | 4 ± 2.2 <sup>s</sup> |                      |                 |                 |                     |
| Trial Summary                 | Negative             | Negative             | Positive        | Positive        | Positive            |
| Positive Control <sup>5</sup> | 274 ± 7.7            | 293 ± 33.8           |                 |                 |                     |
| Positive Control <sup>3</sup> |                      |                      | 434 ± 11.3      | 212 ± 22.2      | 578 ± 11.5          |

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**Strain: TA98**

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| <b>Dose (ug/Plate)</b>        | <b>With 30% Hamster S9</b> |
|-------------------------------|----------------------------|
| Vehicle Control <sup>1</sup>  | 19 ± 2.6                   |
| 10.0                          | 33 ± 7.4                   |
| 33.0                          | 75 ± 6.2                   |
| 100.0                         | 170 ± 27.9                 |
| 333.0                         | 314 ± 34.8                 |
| 1000.0                        | 439 ± 112.9                |
| 2000.0                        |                            |
| Trial Summary                 | Positive                   |
| Positive Control <sup>5</sup> |                            |
| Positive Control <sup>3</sup> | 658 ± 41.8                 |

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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: 0.5 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 \*\***