

Experiment Number: 316866

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: o-Toluidine

CAS Number: 95-53-4

Date Report Requested: 09/12/2018

Time Report Requested: 09:28:27

**NTP Study Number:**

316866

**Study Result:**

Positive

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Test Compound: o-Toluidine

CAS Number: 95-53-4

Date Report Requested: 09/12/2018

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## Strain: TA100

| Dose (ug/Plate)               | Without S9             | Without S9             | With 10% Rat S9        | With 30% Rat S9       | With 10% Hamster S9    |
|-------------------------------|------------------------|------------------------|------------------------|-----------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 121 ± 1.2              | 84 ± 5.0               | 114 ± 10.1             | 86 ± 8.7              | 109 ± 9.9              |
| 33.0                          | 108 ± 6.4              | 71 ± 2.2               | 111 ± 5.9              | 87 ± 7.2              | 121 ± 3.0              |
| 100.0                         | 115 ± 5.7              | 71 ± 2.0               | 109 ± 7.1              | 88 ± 4.0              | 111 ± 6.1              |
| 333.0                         | 108 ± 5.9              | 84 ± 5.0               | 120 ± 6.4              | 91 ± 2.0              | 127 ± 4.0              |
| 500.0                         |                        |                        |                        |                       |                        |
| 1000.0                        | 129 ± 4.4              | 91 ± 3.8               | 117 ± 6.9              | 87 ± 2.9              | 139 ± 5.1              |
| 2000.0                        |                        |                        |                        |                       |                        |
| 3333.0                        | 85 ± 10.5 <sup>s</sup> | 68 ± 12.0 <sup>s</sup> | 114 ± 9.5 <sup>s</sup> | 88 ± 0.9 <sup>s</sup> | 137 ± 8.4 <sup>s</sup> |
| Trial Summary                 | Negative               | Negative               | Negative               | Negative              | Equivocal              |
| Positive Control <sup>2</sup> |                        |                        |                        |                       | 1052 ± 30.7            |
| Positive Control <sup>3</sup> |                        |                        | 1519 ± 30.1            |                       |                        |
| Positive Control <sup>4</sup> |                        |                        |                        | 484 ± 7.0             |                        |
| Positive Control <sup>5</sup> | 1316 ± 5.5             | 1159 ± 11.7            |                        |                       |                        |

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Strain: TA100

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| Dose (ug/Plate)               | With 30% Hamster S9     | With 30% Hamster S9     |
|-------------------------------|-------------------------|-------------------------|
| Vehicle Control <sup>1</sup>  | 90 ± 7.8                | 81 ± 1.7                |
| 33.0                          | 83 ± 5.8                | 97 ± 8.6                |
| 100.0                         | 103 ± 8.5               | 100 ± 2.7               |
| 333.0                         | 131 ± 5.8               | 102 ± 2.7               |
| 500.0                         |                         | 135 ± 8.2               |
| 1000.0                        | 146 ± 10.0              | 159 ± 6.0               |
| 2000.0                        |                         | 176 ± 6.7               |
| 3333.0                        | 222 ± 10.5 <sup>s</sup> | 204 ± 14.7 <sup>s</sup> |
| Trial Summary                 | Positive                | Positive                |
| Positive Control <sup>2</sup> |                         |                         |
| Positive Control <sup>3</sup> |                         |                         |
| Positive Control <sup>4</sup> | 850 ± 36.9              | 1339 ± 32.5             |
| Positive Control <sup>5</sup> |                         |                         |

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## G06: Ames Summary Data

Test Compound: o-Toluidine

CAS Number: 95-53-4

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## Strain: TA1535

| Dose (ug/Plate)               | Without S9            | Without S9            | With 10% Rat S9       | With 30% Rat S9       | With 10% Hamster S9   |
|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Vehicle Control <sup>1</sup>  | 39 ± 2.6              | 22 ± 0.6              | 14 ± 1.5              | 16 ± 1.8              | 12 ± 1.5              |
| 33.0                          | 30 ± 3.5              | 21 ± 1.0              | 7 ± 1.5               | 12 ± 0.7              | 11 ± 1.2              |
| 100.0                         | 33 ± 4.5              | 24 ± 2.3              | 11 ± 0.9              | 11 ± 1.5              | 11 ± 1.2              |
| 333.0                         | 37 ± 2.8              | 19 ± 3.0              | 13 ± 2.9              | 10 ± 1.2              | 10 ± 2.0              |
| 500.0                         |                       |                       |                       |                       |                       |
| 1000.0                        | 34 ± 3.3 <sup>s</sup> | 20 ± 2.4              | 13 ± 1.5 <sup>s</sup> | 11 ± 0.9 <sup>s</sup> | 13 ± 2.5 <sup>s</sup> |
| 2000.0                        |                       |                       |                       |                       |                       |
| 3333.0                        | 34 ± 2.9 <sup>s</sup> | 20 ± 2.8 <sup>s</sup> | 15 ± 2.3 <sup>s</sup> | 11 ± 4.6 <sup>s</sup> | 20 ± 2.9 <sup>s</sup> |
| Trial Summary                 | Negative              | Negative              | Negative              | Negative              | Negative              |
| Positive Control <sup>2</sup> |                       |                       |                       |                       | 107 ± 0.9             |
| Positive Control <sup>3</sup> |                       |                       | 128 ± 3.6             |                       |                       |
| Positive Control <sup>4</sup> |                       |                       |                       | 139 ± 8.7             |                       |
| Positive Control <sup>5</sup> | 1030 ± 4.9            | 761 ± 10.4            |                       |                       |                       |

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Strain: TA1535

| Dose (ug/Plate)               | With 30% Hamster S9   | With 30% Hamster S9   |
|-------------------------------|-----------------------|-----------------------|
| Vehicle Control <sup>1</sup>  | 9 ± 1.5               | 17 ± 1.9              |
| 33.0                          | 11 ± 1.2              | 9 ± 2.6               |
| 100.0                         | 11 ± 2.2              | 16 ± 1.2              |
| 333.0                         | 12 ± 2.1              | 17 ± 1.2              |
| 500.0                         |                       | 15 ± 1.3              |
| 1000.0                        | 18 ± 1.8              | 18 ± 2.9              |
| 2000.0                        |                       | 30 ± 1.9              |
| 3333.0                        | 21 ± 1.3 <sup>s</sup> | 21 ± 2.1 <sup>s</sup> |
| Trial Summary                 | Weakly Positive       | Equivocal             |
| Positive Control <sup>2</sup> |                       |                       |
| Positive Control <sup>3</sup> |                       |                       |
| Positive Control <sup>4</sup> | 175 ± 4.4             | 314 ± 15.9            |
| Positive Control <sup>5</sup> |                       |                       |

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## G06: Ames Summary Data

Test Compound: o-Toluidine

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Date Report Requested: 09/12/2018

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## Strain: TA97

| Dose (ug/Plate)               | Without S9             | Without S9            | With 10% Rat S9        | With 30% Rat S9       | With 10% Hamster S9    |
|-------------------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 70 ± 4.9               | 70 ± 2.0              | 122 ± 9.1              | 141 ± 10.8            | 112 ± 7.5              |
| 33.0                          | 45 ± 7.0               | 72 ± 3.5              | 112 ± 5.8              | 135 ± 12.1            | 107 ± 13.5             |
| 100.0                         | 66 ± 2.3               | 64 ± 5.5              | 113 ± 9.2              | 105 ± 4.6             | 111 ± 11.5             |
| 333.0                         | 46 ± 9.9               | 53 ± 3.2              | 127 ± 9.8              | 106 ± 6.2             | 126 ± 3.4              |
| 1000.0                        | 73 ± 10.5 <sup>s</sup> | 46 ± 2.4 <sup>s</sup> | 114 ± 8.9              | 111 ± 3.5             | 110 ± 6.7              |
| 3333.0                        | 7 ± 3.0 <sup>s</sup>   | 14 ± 6.3 <sup>s</sup> | 100 ± 3.5 <sup>s</sup> | 87 ± 7.0 <sup>s</sup> | 106 ± 4.9 <sup>s</sup> |
| Trial Summary                 | Negative               | Negative              | Negative               | Negative              | Negative               |
| Positive Control <sup>2</sup> |                        |                       |                        |                       | 863 ± 16.9             |
| Positive Control <sup>3</sup> |                        |                       | 1214 ± 20.5            |                       |                        |
| Positive Control <sup>4</sup> |                        |                       |                        | 409 ± 11.1            |                        |
| Positive Control <sup>6</sup> | 269 ± 16.4             | 263 ± 9.8             |                        |                       |                        |

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Strain: TA97

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| Dose (ug/Plate)               | With 30% Hamster S9    |
|-------------------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 106 ± 6.2              |
| 33.0                          | 108 ± 8.2              |
| 100.0                         | 108 ± 7.5              |
| 333.0                         | 104 ± 7.8              |
| 1000.0                        | 105 ± 1.2 <sup>s</sup> |
| 3333.0                        | 101 ± 1.7 <sup>s</sup> |
| Trial Summary                 | Negative               |
| Positive Control <sup>2</sup> |                        |
| Positive Control <sup>3</sup> |                        |
| Positive Control <sup>4</sup> | 615 ± 45.1             |
| Positive Control <sup>6</sup> |                        |

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## Strain: TA98

| Dose (ug/Plate)               | Without S9            | Without S9            | With 10% Rat S9       | With 30% Rat S9       | With 10% Hamster S9 |
|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 19 ± 3.3              | 12 ± 2.6              | 35 ± 0.3              | 28 ± 4.1              | 38 ± 4.6            |
| 33.0                          | 21 ± 1.2              | 13 ± 1.2              | 39 ± 4.6              | 26 ± 5.5              | 47 ± 4.3            |
| 100.0                         | 18 ± 1.2              | 13 ± 0.9              | 35 ± 3.0              | 30 ± 1.0              | 46 ± 1.5            |
| 333.0                         | 18 ± 2.8              | 14 ± 1.3              | 31 ± 2.1              | 35 ± 3.2              | 29 ± 4.1            |
| 1000.0                        | 23 ± 2.2              | 12 ± 2.9 <sup>s</sup> | 40 ± 2.1              | 28 ± 0.7              | 36 ± 0.6            |
| 3333.0                        | 14 ± 1.5 <sup>s</sup> | 10 ± 0.6 <sup>s</sup> | 42 ± 2.6 <sup>s</sup> | 24 ± 2.8 <sup>s</sup> | 28 ± 5.1            |
| Trial Summary                 | Negative              | Negative              | Negative              | Negative              | Equivocal           |
| Positive Control <sup>2</sup> |                       |                       |                       |                       | 541 ± 22.3          |
| Positive Control <sup>3</sup> |                       |                       | 899 ± 23.8            |                       |                     |
| Positive Control <sup>4</sup> |                       |                       |                       | 358 ± 9.2             |                     |
| Positive Control <sup>7</sup> | 1759 ± 26.6           | 1236 ± 8.5            |                       |                       |                     |



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Strain: TA98

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| Dose (ug/Plate)               | With 30% Hamster S9   |
|-------------------------------|-----------------------|
| Vehicle Control <sup>1</sup>  | 29 ± 3.2              |
| 33.0                          | 28 ± 5.6              |
| 100.0                         | 31 ± 1.8              |
| 333.0                         | 26 ± 3.0              |
| 1000.0                        | 39 ± 7.5              |
| 3333.0                        | 41 ± 5.8 <sup>s</sup> |
| Trial Summary                 | Negative              |
| Positive Control <sup>2</sup> |                       |
| Positive Control <sup>3</sup> |                       |
| Positive Control <sup>4</sup> | 854 ± 17.8            |
| Positive Control <sup>7</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: 0.75 ug/Plate 2-Aminoanthracene

3: 1.5 ug/Plate 2-Aminoanthracene

4: 2.0 ug/Plate 2-Aminoanthracene

5: 2.5 ug/Plate Sodium Azide

6: 4.0 ug/Plate 9-Aminoacridine

7: 12.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

\*\* END OF REPORT \*\*