

Experiment Number: **748979**

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

**G06: Ames Summary Data**

Test Compound: **Valeronitrile**

CAS Number: **110-59-8**

Date Report Requested: **09/17/2018**

Time Report Requested: **10:37:30**

**NTP Study Number:**

748979

**Study Result:**

Negative

Experiment Number: 748979

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: Valeronitrile

CAS Number: 110-59-8

Date Report Requested: 09/17/2018

Time Report Requested: 10:37:30

## 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>  | 154 ± 11.9             | 101 ± 4.9  | 130 ± 13.0            | 150 ± 6.3       | 142 ± 7.7             |
| 100.0                         | 120 ± 15.5             | 94 ± 5.4   | 104 ± 15.0            | 152 ± 6.2       | 121 ± 6.2             |
| 333.0                         | 100 ± 8.7              | 107 ± 5.2  | 121 ± 5.2             | 139 ± 8.6       | 134 ± 2.9             |
| 1000.0                        | 102 ± 0.9              | 109 ± 2.6  | 103 ± 8.4             | 143 ± 17.7      | 132 ± 8.0             |
| 3333.0                        | 101 ± 6.7              | 91 ± 6.1   | 109 ± 10.1            | 117 ± 12.0      | 112 ± 12.5            |
| 10000.0                       | 96 ± 11.7 <sup>s</sup> | 86 ± 4.6   | 76 ± 2.2 <sup>s</sup> | 110 ± 4.9       | 86 ± 5.5 <sup>s</sup> |
| Trial Summary                 | Negative               | Negative   | Negative              | Negative        | Negative              |
| Positive Control <sup>2</sup> |                        |            |                       |                 | 713 ± 15.9            |
| Positive Control <sup>3</sup> |                        |            | 493 ± 40.7            |                 |                       |
| Positive Control <sup>4</sup> | 464 ± 27.6             | 448 ± 13.7 |                       |                 |                       |
| Positive Control <sup>5</sup> |                        |            |                       | 516 ± 7.6       |                       |

Experiment Number: 748979  
Test Type: Genetic Toxicology - Bacterial  
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G06: Ames Summary Data  
Test Compound: Valeronitrile  
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Date Report Requested: 09/17/2018  
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Strain: TA100

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| Dose (ug/Plate)               | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 115 ± 6.7           |
| 100.0                         | 116 ± 10.3          |
| 333.0                         | 99 ± 9.0            |
| 1000.0                        | 121 ± 17.6          |
| 3333.0                        | 117 ± 12.3          |
| 10000.0                       | 101 ± 4.7           |
| Trial Summary                 | Negative            |
| Positive Control <sup>2</sup> |                     |
| Positive Control <sup>3</sup> | 715 ± 17.0          |
| Positive Control <sup>4</sup> |                     |
| Positive Control <sup>5</sup> |                     |

Experiment Number: 748979

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: Valeronitrile

CAS Number: 110-59-8

Date Report Requested: 09/17/2018

Time Report Requested: 10:37:30

## 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>  | 18 ± 1.2   | 18 ± 0.9             | 13 ± 1.2             | 16 ± 3.0        | 14 ± 1.5             |
| 100.0                         | 13 ± 0.0   | 16 ± 1.5             | 12 ± 1.0             | 16 ± 1.5        | 11 ± 1.7             |
| 333.0                         | 14 ± 2.1   | 18 ± 4.7             | 11 ± 0.9             | 15 ± 2.3        | 9 ± 2.0              |
| 1000.0                        | 11 ± 1.3   | 16 ± 3.0             | 10 ± 2.5             | 13 ± 0.7        | 10 ± 2.0             |
| 3333.0                        | 11 ± 2.2   | 8 ± 2.0              | 12 ± 2.1             | 8 ± 0.9         | 8 ± 3.3              |
| 10000.0                       | 9 ± 0.3    | 4 ± 1.9 <sup>s</sup> | 9 ± 1.8 <sup>s</sup> | 11 ± 2.1        | 4 ± 0.9 <sup>s</sup> |
| Trial Summary                 | Negative   | Negative             | Negative             | Negative        | Negative             |
| Positive Control <sup>3</sup> |            |                      |                      |                 | 171 ± 12.0           |
| Positive Control <sup>4</sup> | 300 ± 15.6 | 322 ± 16.1           |                      |                 |                      |
| Positive Control <sup>5</sup> |            |                      | 87 ± 5.3             |                 |                      |
| Positive Control <sup>6</sup> |            |                      |                      | 123 ± 12.2      |                      |

Experiment Number: 748979  
Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

G06: Ames Summary Data  
Test Compound: Valeronitrile  
CAS Number: 110-59-8

Date Report Requested: 09/17/2018  
Time Report Requested: 10:37:30

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Strain: TA1535

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| Dose (ug/Plate)               | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 14 ± 3.2            |
| 100.0                         | 10 ± 1.3            |
| 333.0                         | 13 ± 2.6            |
| 1000.0                        | 11 ± 1.5            |
| 3333.0                        | 11 ± 1.3            |
| 10000.0                       | 6 ± 0.9             |
| Trial Summary                 | Negative            |
| Positive Control <sup>3</sup> |                     |
| Positive Control <sup>4</sup> |                     |
| Positive Control <sup>5</sup> | 484 ± 20.7          |
| Positive Control <sup>6</sup> |                     |

Experiment Number: 748979

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## G06: Ames Summary Data

Test Compound: Valeronitrile

CAS Number: 110-59-8

Date Report Requested: 09/17/2018

Time Report Requested: 10:37:30

## Strain: TA97

| Dose (ug/Plate)               | Without S9 | Without S9   | With 10% Rat S9         | With 30% Rat S9 | With 30% Rat S9        |
|-------------------------------|------------|--------------|-------------------------|-----------------|------------------------|
| Vehicle Control <sup>1</sup>  | 123 ± 4.1  | 164 ± 7.2    | 179 ± 7.5               | 136 ± 13.7      | 228 ± 4.1              |
| 10.0                          |            |              |                         |                 |                        |
| 33.0                          |            |              |                         |                 |                        |
| 100.0                         | 118 ± 4.8  | 196 ± 7.0    | 202 ± 12.6              | 206 ± 2.2       | 262 ± 18.8             |
| 333.0                         | 127 ± 12.5 | 192 ± 5.9    | 202 ± 4.9               | 201 ± 15.2      | 256 ± 9.3              |
| 1000.0                        | 112 ± 0.9  | 193 ± 10.2   | 181 ± 8.5               | 189 ± 7.3       | 261 ± 20.2             |
| 3333.0                        | 126 ± 7.0  | 168 ± 5.0    | 164 ± 11.2              | 148 ± 20.7      | 201 ± 7.8              |
| 10000.0                       | 115 ± 5.0  | 175 ± 6.8    | 130 ± 17.9 <sup>s</sup> | 113 ± 6.1       | 146 ± 9.6 <sup>s</sup> |
| Trial Summary                 | Negative   | Negative     | Negative                | Equivocal       | Negative               |
| Positive Control <sup>2</sup> |            |              |                         |                 |                        |
| Positive Control <sup>3</sup> |            |              | 348 ± 13.1              |                 |                        |
| Positive Control <sup>5</sup> |            |              |                         | 335 ± 11.0      | 463 ± 15.1             |
| Positive Control <sup>7</sup> | 464 ± 30.9 | 1384 ± 174.0 |                         |                 |                        |

Experiment Number: 748979

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: Valeronitrile

CAS Number: 110-59-8

Date Report Requested: 09/17/2018

Time Report Requested: 10:37:30

## Strain: TA97

| Dose (ug/Plate)               | With 30% Rat S9 | With 10% Hamster S9 | With 30% Hamster S9 |
|-------------------------------|-----------------|---------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 215 ± 12.5      | 183 ± 7.1           | 129 ± 8.9           |
| 10.0                          | 223 ± 9.3       |                     |                     |
| 33.0                          | 198 ± 5.0       |                     |                     |
| 100.0                         | 200 ± 20.3      | 188 ± 13.5          | 130 ± 5.0           |
| 333.0                         | 176 ± 8.5       | 204 ± 7.6           | 127 ± 6.7           |
| 1000.0                        | 173 ± 6.9       | 199 ± 18.6          | 109 ± 8.6           |
| 3333.0                        |                 | 195 ± 16.0          | 130 ± 17.9          |
| 10000.0                       |                 | 208 ± 9.5           | 149 ± 3.9           |
| Trial Summary                 | Negative        | Negative            | Negative            |
| Positive Control <sup>2</sup> |                 | 427 ± 34.7          |                     |
| Positive Control <sup>3</sup> |                 |                     | 342 ± 6.8           |
| Positive Control <sup>5</sup> | 370 ± 9.8       |                     |                     |
| Positive Control <sup>7</sup> |                 |                     |                     |

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G06: Ames Summary Data  
Test Compound: Valeronitrile  
CAS Number: 110-59-8

Date Report Requested: 09/17/2018  
Time Report Requested: 10:37:30

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>  | 17 ± 2.3              | 18 ± 4.9              | 20 ± 2.0              | 27 ± 0.9        | 30 ± 1.5              |
| 100.0                         | 15 ± 1.2              | 17 ± 1.2              | 20 ± 0.6              | 24 ± 1.5        | 26 ± 1.5              |
| 333.0                         | 16 ± 1.5              | 19 ± 2.3              | 18 ± 1.3              | 24 ± 1.3        | 29 ± 2.9              |
| 1000.0                        | 19 ± 0.7              | 17 ± 2.2              | 21 ± 2.0              | 21 ± 0.3        | 24 ± 2.0              |
| 3333.0                        | 13 ± 2.6              | 13 ± 1.7              | 22 ± 2.6              | 22 ± 1.5        | 31 ± 0.3              |
| 10000.0                       | 11 ± 2.3 <sup>s</sup> | 18 ± 3.5 <sup>s</sup> | 17 ± 2.2 <sup>s</sup> | 26 ± 1.5        | 15 ± 2.9 <sup>s</sup> |
| Trial Summary                 | Negative              | Negative              | Negative              | Negative        | Negative              |
| Positive Control <sup>2</sup> |                       |                       |                       |                 | 583 ± 16.4            |
| Positive Control <sup>3</sup> |                       |                       | 309 ± 11.8            | 169 ± 5.0       |                       |
| Positive Control <sup>8</sup> | 619 ± 16.5            | 506 ± 40.9            |                       |                 |                       |



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Strain: TA98

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| Dose (ug/Plate)               | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 29 ± 3.5            |
| 100.0                         | 25 ± 2.9            |
| 333.0                         | 23 ± 1.7            |
| 1000.0                        | 24 ± 2.2            |
| 3333.0                        | 17 ± 4.1            |
| 10000.0                       | 14 ± 2.7            |
| Trial Summary                 | Negative            |
| Positive Control <sup>2</sup> |                     |
| Positive Control <sup>3</sup> | 487 ± 27.5          |
| 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: Dimethyl Sulfoxide
- 2: 0.5 ug/Plate 2-Aminoanthracene
- 3: 1.0 ug/Plate 2-Aminoanthracene
- 4: 1.0 ug/Plate Sodium Azide
- 5: 2.5 ug/Plate 2-Aminoanthracene
- 6: 5.0 ug/Plate 2-Aminoanthracene
- 7: 50.0 ug/Plate 9-Aminoacridine
- 8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
- s: Slight Toxicity

\*\* END OF REPORT \*\*