

Experiment Number: 435037

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

**G06: Ames Summary Data**

Test Compound: **4-Fluoro-dl-phenylalanine**

CAS Number: 51-65-0

Date Report Requested: **09/10/2018**

Time Report Requested: **21:12:42**

**NTP Study Number:**

435037

**Study Result:**

Negative

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Test Compound: 4-Fluoro-dl-phenylalanine  
CAS Number: 51-65-0

Date Report Requested: 09/10/2018

Time Report Requested: 21:12:42

## Strain: TA100

| Dose (ug/Plate)               | Without S9  | Without S9  | With 10% Rat S9       | With 10% Rat S9 | With 10% Hamster S9 |
|-------------------------------|-------------|-------------|-----------------------|-----------------|---------------------|
| Vehicle Control <sup>1</sup>  | 151 ± 9.0   | 147 ± 7.4   | 128 ± 17.2            | 139 ± 3.2       | 143 ± 9.8           |
| 0.1                           |             |             |                       | 154 ± 7.0       |                     |
| 0.3                           |             | 137 ± 9.4   |                       |                 |                     |
| 1.0                           |             |             |                       | 156 ± 4.7       |                     |
| 3.3                           |             | 115 ± 9.4   | 109 ± 7.5             |                 | 148 ± 6.4           |
| 10.0                          | 108 ± 8.3   |             | 99 ± 3.6              | 109 ± 10.7      | 137 ± 3.5           |
| 33.0                          | 126 ± 11.8  | 98 ± 5.2    | 95 ± 4.0              |                 | 123 ± 4.8           |
| 100.0                         | 105 ± 11.5  |             | 74 ± 5.7              | 71 ± 11.7       | 102 ± 9.0           |
| 333.0                         | 108 ± 4.6   | 73 ± 8.9    | 37 ± 8.9 <sup>s</sup> | 58 ± 4.3        | 64 ± 6.8            |
| 1000.0                        | 58 ± 2.3    | 39 ± 2.6    |                       |                 |                     |
| Trial Summary                 | Negative    | Negative    | Negative              | Negative        | Negative            |
| Positive Control <sup>2</sup> |             |             |                       |                 | 1081 ± 8.6          |
| Positive Control <sup>3</sup> |             |             | 1153 ± 6.7            | 899 ± 51.2      |                     |
| Positive Control <sup>4</sup> | 1307 ± 24.8 | 1142 ± 42.6 |                       |                 |                     |

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**Strain: TA100**

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| <b>Dose (ug/Plate)</b>        | <b>With 10% Hamster S9</b> |
|-------------------------------|----------------------------|
| Vehicle Control <sup>1</sup>  | 152 ± 10.7                 |
| 0.1                           | 133 ± 8.0                  |
| 0.3                           |                            |
| 1.0                           | 141 ± 5.8                  |
| 3.3                           |                            |
| 10.0                          | 112 ± 10.8                 |
| 33.0                          |                            |
| 100.0                         | 88 ± 4.0                   |
| 333.0                         | 83 ± 6.6                   |
| 1000.0                        |                            |
| Trial Summary                 | Negative                   |
| Positive Control <sup>2</sup> | 887 ± 24.0                 |
| Positive Control <sup>3</sup> |                            |
| Positive Control <sup>4</sup> |                            |

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## G06: Ames Summary Data

Test Compound: 4-Fluoro-dl-phenylalanine  
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## Strain: TA1535

| Dose (ug/Plate)               | Without S9 | Without S9 | Without S9  | With 10% Rat S9 | With 10% Rat S9 |
|-------------------------------|------------|------------|-------------|-----------------|-----------------|
| Vehicle Control <sup>1</sup>  | 47 ± 4.7   | 29 ± 2.4   | 24 ± 1.5    | 35 ± 1.7        | 16 ± 1.0        |
| 0.1                           |            |            |             |                 | 13 ± 0.7        |
| 0.3                           |            | 22 ± 3.5   |             |                 |                 |
| 1.0                           |            |            |             |                 | 16 ± 3.0        |
| 3.3                           |            | 27 ± 3.5   |             | 42 ± 3.5        |                 |
| 10.0                          | 49 ± 4.3   |            | 20 ± 1.9    | 30 ± 3.9        | 8 ± 0.9         |
| 33.0                          | 48 ± 2.2   | 20 ± 1.5   | 20 ± 1.2    | 38 ± 1.7        |                 |
| 100.0                         | 41 ± 6.1   |            | 16 ± 0.6    | 29 ± 1.3        | 12 ± 3.4        |
| 333.0                         | 46 ± 4.7   | 6 ± 2.0    | 9 ± 2.5     | 23 ± 0.9        | 8 ± 1.2         |
| 1000.0                        | 34 ± 4.6   | 1 ± 0.3    | 3 ± 0.3     |                 |                 |
| Trial Summary                 | Negative   | Negative   | Negative    | Negative        | Negative        |
| Positive Control <sup>2</sup> |            |            |             |                 |                 |
| Positive Control <sup>3</sup> |            |            |             | 119 ± 9.5       | 110 ± 5.9       |
| Positive Control <sup>4</sup> | 953 ± 33.6 | 869 ± 27.6 | 1092 ± 50.8 |                 |                 |

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## Strain: TA1535

| Dose (ug/Plate)               | With 10% Rat S9 | With 10% Hamster S9 | With 10% Hamster S9 | With 10% Hamster S9 |
|-------------------------------|-----------------|---------------------|---------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 17 ± 1.9        | 45 ± 1.0            | 16 ± 1.5            | 18 ± 0.3            |
| 0.1                           |                 |                     | 11 ± 2.8            |                     |
| 0.3                           |                 |                     |                     |                     |
| 1.0                           |                 |                     | 16 ± 1.7            |                     |
| 3.3                           | 17 ± 3.2        | 42 ± 2.3            |                     | 14 ± 1.2            |
| 10.0                          | 19 ± 0.6        | 33 ± 1.2            | 13 ± 1.3            | 13 ± 1.3            |
| 33.0                          | 11 ± 1.0        | 40 ± 2.1            |                     | 9 ± 2.0             |
| 100.0                         | 8 ± 2.3         | 29 ± 2.0            | 8 ± 2.1             | 12 ± 2.6            |
| 333.0                         | 10 ± 2.2        | 28 ± 3.8            | 9 ± 1.3             | 9 ± 3.2             |
| 1000.0                        |                 |                     |                     |                     |
| Trial Summary                 | Negative        | Negative            | Negative            | Negative            |
| Positive Control <sup>2</sup> |                 | 124 ± 7.3           | 142 ± 8.0           | 70 ± 9.2            |
| Positive Control <sup>3</sup> | 89 ± 2.7        |                     |                     |                     |
| Positive Control <sup>4</sup> |                 |                     |                     |                     |

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## Strain: TA1537

| Dose (ug/Plate)               | Without S9 | Without S9 | With 10% Rat S9 | With 10% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control <sup>1</sup>  | 10 ± 2.0   | 6 ± 1.7    | 13 ± 0.7        | 6 ± 0.6         | 15 ± 1.2            |
| 0.1                           |            |            |                 | 10 ± 2.7        |                     |
| 0.3                           |            | 7 ± 0.7    |                 |                 |                     |
| 1.0                           |            |            |                 | 7 ± 0.3         |                     |
| 3.3                           |            | 8 ± 1.2    | 14 ± 1.5        |                 | 11 ± 0.7            |
| 10.0                          | 7 ± 0.6    |            | 9 ± 2.0         | 7 ± 2.3         | 11 ± 0.9            |
| 33.0                          | 6 ± 2.0    | 7 ± 2.4    | 8 ± 1.2         |                 | 12 ± 0.7            |
| 100.0                         | 6 ± 1.3    |            | 9 ± 1.7         | 7 ± 2.3         | 9 ± 1.7             |
| 333.0                         | 5 ± 2.0    | 3 ± 1.3    | 8 ± 0.0         | 8 ± 1.2         | 10 ± 3.0            |
| 1000.0                        | 3 ± 1.2    | 2 ± 0.9    |                 |                 |                     |
| Trial Summary                 | Negative   | Negative   | Negative        | Negative        | Negative            |
| Positive Control <sup>2</sup> |            |            |                 |                 | 85 ± 7.7            |
| Positive Control <sup>3</sup> |            |            | 85 ± 11.2       | 67 ± 8.5        |                     |
| Positive Control <sup>5</sup> | 673 ± 61.0 | 428 ± 18.0 |                 |                 |                     |

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**Strain: TA1537**

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| <b>Dose (ug/Plate)</b>        | <b>With 10% Hamster S9</b> |
|-------------------------------|----------------------------|
| Vehicle Control <sup>1</sup>  | 12 ± 2.3                   |
| 0.1                           | 5 ± 2.3                    |
| 0.3                           |                            |
| 1.0                           | 9 ± 1.2                    |
| 3.3                           |                            |
| 10.0                          | 8 ± 0.3                    |
| 33.0                          |                            |
| 100.0                         | 5 ± 2.1                    |
| 333.0                         | 4 ± 0.3                    |
| 1000.0                        |                            |
| Trial Summary                 | Negative                   |
| Positive Control <sup>2</sup> | 84 ± 4.0                   |
| Positive Control <sup>3</sup> |                            |
| Positive Control <sup>5</sup> |                            |

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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>  | 24 ± 0.9    | 19 ± 0.6    | 30 ± 2.9        | 30 ± 2.5        | 33 ± 2.0            |
| 0.1                           |             |             |                 | 29 ± 3.0        |                     |
| 0.3                           |             | 19 ± 3.1    |                 |                 |                     |
| 1.0                           |             |             |                 | 27 ± 4.1        |                     |
| 3.3                           |             | 17 ± 2.6    | 32 ± 1.8        |                 | 34 ± 3.3            |
| 10.0                          | 20 ± 2.1    |             | 25 ± 3.2        | 27 ± 4.6        | 29 ± 3.2            |
| 33.0                          | 15 ± 0.9    | 11 ± 1.0    | 24 ± 2.3        |                 | 33 ± 4.6            |
| 100.0                         | 19 ± 2.7    |             | 22 ± 1.2        | 19 ± 1.5        | 28 ± 1.8            |
| 333.0                         | 9 ± 1.2     | 9 ± 0.7     | 18 ± 1.2        | 17 ± 2.1        | 25 ± 2.3            |
| 1000.0                        | 10 ± 2.1    | 11 ± 1.5    |                 |                 |                     |
| Trial Summary                 | Negative    | Negative    | Negative        | Negative        | Negative            |
| Positive Control <sup>2</sup> |             |             |                 |                 | 752 ± 376.1         |
| Positive Control <sup>3</sup> |             |             | 1107 ± 7.5      | 670 ± 24.3      |                     |
| Positive Control <sup>6</sup> | 1570 ± 14.3 | 1302 ± 40.8 |                 |                 |                     |



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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>  | 27 ± 3.0                   |
| 0.1                           | 29 ± 5.0                   |
| 0.3                           |                            |
| 1.0                           | 29 ± 3.5                   |
| 3.3                           |                            |
| 10.0                          | 31 ± 1.9                   |
| 33.0                          |                            |
| 100.0                         | 23 ± 2.0                   |
| 333.0                         | 21 ± 0.6                   |
| 1000.0                        |                            |
| Trial Summary                 | Negative                   |
| Positive Control <sup>2</sup> | 763 ± 16.5                 |
| Positive Control <sup>3</sup> |                            |
| Positive Control <sup>6</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: 2.5 ug/Plate Sodium Azide

5: 80.0 ug/Plate 9-Aminoacridine

6: 12.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

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