

Experiment Number: 186316

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

**G06: Ames Summary Data**

Test Compound: **AF-2**

CAS Number: **3688-53-7**

Date Report Requested: **09/13/2018**

Time Report Requested: **19:40:36**

**NTP Study Number:**

186316

**Study Result:**

Positive

Experiment Number: 186316

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Mutagenicity

## G06: Ames Summary Data

Test Compound: AF-2

CAS Number: 3688-53-7

Date Report Requested: 09/13/2018

Time Report Requested: 19:40:36

## Strain: TA100

| Dose (ug/Plate)               | Without S9  | Without S9  | Without S9 | With 10% Rat S9 | With 10% Rat S9 |
|-------------------------------|-------------|-------------|------------|-----------------|-----------------|
| Vehicle Control <sup>1</sup>  | 85 ± 2.3    | 122 ± 8.3   | 152 ± 12.4 | 133 ± 10.2      | 157 ± 13.8      |
| 0.0                           |             | 124 ± 5.1   | 171 ± 13.0 | 136 ± 14.1      | 157 ± 4.0       |
|                               | 252 ± 33.7  | 0.001       |            | 297 ± 8.6       | 181 ± 25.5      |
|                               | 231 ± 5.5   | 0.003       | 903 ± 25.5 | 455 ± 18.9      | 203 ± 24.0      |
|                               | 230 ± 27.4  | 0.01        | Toxic      | 302 ± 18.4      | 521 ± 23.5      |
|                               | 339 ± 21.4  | 0.03        | Toxic      |                 |                 |
| 369 ± 10.5                    | 387 ± 6.9   | 0.1         | 0 ± 0.0    |                 |                 |
| 545 ± 48.7                    |             | 0.3         | 0 ± 0.0    |                 |                 |
| 611 ± 44.1                    |             | 1.0         |            |                 |                 |
| 378 ± 3.4                     |             | 3.3         |            |                 |                 |
| Toxic                         |             | 10.0        |            |                 |                 |
| Trial Summary                 | Equivocal   | Positive    | Positive   | Equivocal       | Positive        |
| Positive Control <sup>2</sup> |             |             |            | 2086 ± 106.3    | 2333 ± 153.0    |
| Positive Control <sup>3</sup> | 1499 ± 90.4 | 1518 ± 31.3 | 685 ± 25.8 |                 |                 |

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Test Type: **Genetic Toxicology - Bacterial  
Mutagenicity**Test Compound: **AF-2**

Time Report Requested: 19:40:36

CAS Number: 3688-53-7

**Strain: TA100**

| <b>Dose (ug/Plate)</b>              | <b>With 10% Rat S9</b> | <b>With 10% Hamster S9</b>             | <b>With 10% Hamster S9</b>             | <b>With 10% Hamster S9</b> |
|-------------------------------------|------------------------|--|--|----------------------------|
| Vehicle Control <sup>1</sup><br>0.0 | 202 ± 7.3              | 146 ± 14.4                             | 176 ± 9.0<br>211 ± 22.7<br>180 ± 15.8  | 226 ± 29.5                 |
| 369 ± 10.5                          | 573 ± 14.7             | 238 ± 15.2<br>416 ± 13.9<br>624 ± 34.2 | 284 ± 15.1<br>488 ± 29.9<br>784 ± 41.0 | 367 ± 45.9                 |
| 545 ± 48.7                          | Toxic                  | 405 ± 26.4                             |  | 587 ± 79.4                 |
| 611 ± 44.1                          | 23 ± 4.0               | 386 ± 46.4                             |  | 274 ± 35.0                 |
| 378 ± 3.4                           | 0 ± 0.0                |  |  | Toxic                      |
| Toxic                               | 0 ± 0.0                |  |  | Toxic                      |
| Trial Summary                       | Positive               | Positive                               | Positive                               | Weakly Positive            |
| Positive Control <sup>2</sup>       | 1539 ± 143.6           | 1314 ± 35.7                            | 2615 ± 100.1                           | 2288 ± 2.7                 |
| Positive Control <sup>3</sup>       |                        |  |  |                            |

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CAS Number: 3688-53-7

Date Report Requested: 09/13/2018  
Time Report Requested: 19:40:36

Strain: TA1535

| Dose (ug/Plate)               | Without S9 | With 10% Rat S9 | With 10% Hamster S9 | With 10% Hamster S9 |
|-------------------------------|------------|-----------------|---------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 15 ± 1.2   | 15 ± 4.0        | 8 ± 0.7             | 15 ± 3.8            |
| 0.001                         | 10 ± 4.5   | 12 ± 2.5        |                     |                     |
| 0.003                         | 8 ± 0.9    | 15 ± 3.6        |                     | 10 ± 2.9            |
| 0.01                          | 11 ± 2.3   | 13 ± 0.9        |                     | 10 ± 1.5            |
| 0.03                          | 12 ± 1.9   | 15 ± 2.3        |                     | 16 ± 1.8            |
| 0.1                           | 13 ± 4.5   | 22 ± 1.9        | 11 ± 1.2            | 14 ± 0.6            |
| 0.3                           |            |                 | 5 ± 1.9             | 15 ± 0.3            |
| 1.0                           |            |                 | Toxic               |                     |
| 3.3                           |            |                 | 0 ± 0.0             |                     |
| 10.0                          |            |                 | 0 ± 0.0             |                     |
| Trial Summary                 | Negative   | Negative        | Negative            | Negative            |
| Positive Control <sup>4</sup> |            | 249 ± 18.4      | 148 ± 12.8          | 339 ± 24.1          |
| Positive Control <sup>3</sup> | 900 ± 48.0 |                 |                     |                     |

Experiment Number: 186316  
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G06: Ames Summary Data  
Test Compound: AF-2  
CAS Number: 3688-53-7

Date Report Requested: 09/13/2018  
Time Report Requested: 19:40:36

Strain: TA1537

| Dose (ug/Plate)               | Without S9 | With 10% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|-----------------|---------------------|
| Vehicle Control <sup>1</sup>  | 11 ± 1.0   | 18 ± 2.2        | 22 ± 2.6            |
| 0.0                           |            | 15 ± 1.5        |                     |
| 0.001                         | 12 ± 2.0   | 20 ± 2.8        |                     |
| 0.003                         | 12 ± 1.5   | 18 ± 3.8        | 24 ± 1.3            |
| 0.01                          | 13 ± 1.5   | 12 ± 1.2        | 22 ± 0.6            |
| 0.03                          | 11 ± 0.3   | 19 ± 6.0        | 22 ± 1.9            |
| 0.1                           | Toxic      |                 | 23 ± 4.4            |
| 0.3                           |            |                 | 22 ± 3.7            |
| 1.0                           |            |                 |                     |
| 3.3                           |            |                 |                     |
| 10.0                          |            |                 |                     |
| Trial Summary                 | Negative   | Negative        | Negative            |
| Positive Control <sup>4</sup> |            | 268 ± 23.0      | 171 ± 20.5          |
| Positive Control <sup>5</sup> | 297 ± 53.0 |                 |                     |

Experiment Number: 186316

**G06: Ames Summary Data**

Date Report Requested: 09/13/2018

Test Type: **Genetic Toxicology - Bacterial Mutagenicity**Test Compound: **AF-2**

Time Report Requested: 19:40:36

CAS Number: 3688-53-7

**Strain: TA98**

| <b>Dose (ug/Plate)</b>        | <b>Without S9</b> | <b>Without S9</b> | <b>Without S9</b> | <b>With 10% Rat S9</b> | <b>With 10% Rat S9</b> |
|-------------------------------|-------------------|-------------------|-------------------|------------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 16 ± 1.5          | 23 ± 2.8          | 13 ± 2.9          | 15 ± 1.3               | 37 ± 1.9               |
| 0.003                         |                   | 19 ± 0.3          | 20 ± 3.2          |                        |                        |
| 0.01                          |                   | 45 ± 1.8          | 54 ± 3.7          |                        | 54 ± 2.1               |
| 0.03                          |                   | 101 ± 7.0         | 104 ± 3.2         |                        | 107 ± 2.2              |
| 0.1                           | 81 ± 9.6          | 302 ± 16.9        | 66 ± 10.0         | 208 ± 20.9             | 254 ± 23.1             |
| 0.3                           | Toxic             | 95 ± 16.5         |                   | 98 ± 9.8               | 258 ± 12.7             |
| 0.33                          |                   |                   | 48 ± 3.0          |                        |                        |
| 1.0                           | 4 ± 1.2           |                   |                   | Toxic                  | 40 ± 4.6               |
| 3.3                           | 0 ± 0.0           |                   |                   | 5 ± 2.5                |                        |
| 10.0                          | 0 ± 0.0           |                   |                   | 0 ± 0.0                |                        |
| Trial Summary                 | Equivocal         | Positive          | Positive          | Equivocal              | Positive               |
| Positive Control <sup>2</sup> |                   |                   |                   | 1444 ± 109.9           | 521 ± 3.5              |
| Positive Control <sup>6</sup> | 177 ± 16.3        | 679 ± 34.7        | 438 ± 25.7        |                        |                        |

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Test Compound: AF-2

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Time Report Requested: 19:40:36

## Strain: TA98

| 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 ± 2.9        | 14 ± 1.8            | 26 ± 1.7            | 26 ± 0.3            |
| 0.003                         | 38 ± 4.5        |                     |                     |                     |
| 0.01                          | 78 ± 2.0        |                     |                     | 29 ± 0.9            |
| 0.03                          | 156 ± 10.2      |                     | 39 ± 0.9            | 51 ± 3.1            |
| 0.1                           | 355 ± 19.0      | 93 ± 18.7           | 79 ± 6.9            | 183 ± 14.2          |
| 0.3                           | 91 ± 20.2       | 174 ± 14.4          | 183 ± 14.8          | 323 ± 37.8          |
| 0.33                          |                 |                     |                     |                     |
| 1.0                           |                 | 148 ± 15.6          | 322 ± 19.3          | 42 ± 10.2           |
| 3.3                           |                 | Toxic               | Toxic               |                     |
| 10.0                          |                 | Toxic               |                     |                     |
| Trial Summary                 | Positive        | Positive            | Positive            | Positive            |
| Positive Control <sup>2</sup> | 737 ± 160.2     | 646 ± 23.4          | 1411 ± 48.2         | 1632 ± 32.0         |
| 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: 1.0 ug/Plate 2-Aminoanthracene
- 3: 3.3 ug/Plate Sodium Azide
- 4: 2.0 ug/Plate 2-Aminoanthracene
- 5: 33.0 ug/Plate 9-Aminoacridine
- 6: 3.3 ug/Plate 4-Nitro-O-Phenylenediamine

\*\* END OF REPORT \*\*