

Experiment Number: 123958

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: 2-Pentanone

CAS Number: 107-87-9

Date Report Requested: 09/12/2018

Time Report Requested: 02:33:04

**NTP Study Number:**

123958

**Study Result:**

Negative

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## G06: Ames Summary Data

Test Compound: 2-Pentanone

CAS Number: 107-87-9

Date Report Requested: 09/12/2018

Time Report Requested: 02:33:04

## Strain: TA100

| Dose (mL/Chamber)             | Without S9 | Without S9 | With 10% Rat S9 | With 30% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control <sup>1</sup>  | 116 ± 3.8  | 94 ± 7.7   | 110 ± 7.5       | 125 ± 8.0       | 84 ± 1.9            |
| 0.01                          | 104 ± 4.9  |            |                 | 110 ± 6.4       |                     |
| 0.05                          | 102 ± 6.4  | 114 ± 31.5 | 90 ± 5.8        | 116 ± 2.3       | 99 ± 8.7            |
| 0.1                           | 106 ± 5.8  | 95 ± 2.8   | 105 ± 5.8       | 113 ± 6.5       | 113 ± 1.5           |
| 0.5                           | 98 ± 5.8   | 114 ± 10.1 | 114 ± 7.1       | 121 ± 2.0       | 106 ± 2.2           |
| 1.0                           | 89 ± 1.9   | 87 ± 4.4   | 100 ± 2.5       | 96 ± 1.8        | 95 ± 1.5            |
| 2.0                           |            | 87 ± 6.2   | 81 ± 8.9        |                 | 88 ± 0.9            |
| 3.0                           |            |            |                 |                 |                     |
| 4.0                           |            |            |                 |                 |                     |
| 5.0                           |            |            |                 |                 |                     |
| Trial Summary                 | Negative   | Negative   | Negative        | Negative        | Negative            |
| Positive Control <sup>2</sup> |            |            |                 |                 | 711 ± 39.5          |
| Positive Control <sup>3</sup> | 564 ± 10.5 | 890 ± 5.6  |                 |                 |                     |
| Positive Control <sup>4</sup> |            |            | 1064 ± 52.3     |                 |                     |
| Positive Control <sup>5</sup> |            |            |                 |                 |                     |
| Positive Control <sup>6</sup> |            |            |                 | 1251 ± 57.9     |                     |

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Strain: TA100

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| Dose (mL/Chamber)             | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 125 ± 5.8           |
| 0.01                          | 129 ± 3.2           |
| 0.05                          | 114 ± 5.0           |
| 0.1                           | 135 ± 2.6           |
| 0.5                           | 109 ± 3.5           |
| 1.0                           | 94 ± 2.3            |
| 2.0                           |                     |
| 3.0                           |                     |
| 4.0                           |                     |
| 5.0                           |                     |
| Trial Summary                 | Negative            |
| Positive Control <sup>2</sup> |                     |
| Positive Control <sup>3</sup> |                     |
| Positive Control <sup>4</sup> |                     |
| Positive Control <sup>5</sup> | 1070 ± 34.5         |
| Positive Control <sup>6</sup> |                     |

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## G06: Ames Summary Data

Test Compound: 2-Pentanone

CAS Number: 107-87-9

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Time Report Requested: 02:33:04

## Strain: TA1535

| Dose (mL/Chamber)             | Without S9 | Without S9 | With 10% Rat S9 | With 30% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control <sup>1</sup>  | 19 ± 1.5   | 10 ± 2.5   | 16 ± 1.3        | 15 ± 2.3        | 14 ± 2.6            |
| 0.05                          | 15 ± 3.2   | 12 ± 1.8   | 11 ± 0.9        | 16 ± 3.2        | 15 ± 1.5            |
| 0.1                           | 14 ± 1.3   | 9 ± 0.7    | 12 ± 1.3        | 13 ± 1.3        | 13 ± 1.2            |
| 0.5                           | 11 ± 1.2   | 12 ± 1.8   | 13 ± 2.0        | 13 ± 2.0        | 13 ± 2.2            |
| 1.0                           | 13 ± 2.9   | 10 ± 0.9   | 20 ± 1.0        | 13 ± 1.9        | 14 ± 0.6            |
| 2.0                           | 4 ± 0.9    | 12 ± 1.7   | 10 ± 1.2        | 4 ± 0.7         | 14 ± 1.8            |
| Trial Summary                 | Negative   | Negative   | Negative        | Negative        | Negative            |
| Positive Control <sup>2</sup> |            |            |                 |                 | 118 ± 6.2           |
| Positive Control <sup>3</sup> | 310 ± 2.9  | 627 ± 33.9 |                 |                 |                     |
| Positive Control <sup>5</sup> |            |            |                 |                 |                     |
| Positive Control <sup>6</sup> |            |            | 289 ± 18.7      | 181 ± 23.2      |                     |

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G06: Ames Summary Data  
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Strain: TA1535

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| Dose (mL/Chamber)             | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 15 ± 2.3            |
| 0.05                          | 13 ± 1.7            |
| 0.1                           | 17 ± 1.5            |
| 0.5                           | 19 ± 4.6            |
| 1.0                           | 20 ± 1.8            |
| 2.0                           | 4 ± 1.2             |
| Trial Summary                 | Negative            |
| Positive Control <sup>2</sup> |                     |
| Positive Control <sup>3</sup> |                     |
| Positive Control <sup>5</sup> | 255 ± 21.8          |
| Positive Control <sup>6</sup> |                     |

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Strain: TA1537

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| Dose (mL/Chamber)             | Without S9           |
|-------------------------------|----------------------|
| Vehicle Control <sup>1</sup>  | 5 ± 1.5              |
| 0.05                          | 5 ± 0.9              |
| 0.1                           | 5 ± 0.0              |
| 0.5                           | 4 ± 0.9              |
| 1.0                           | 1 ± 0.7              |
| 2.0                           | 0 ± 0.0 <sup>s</sup> |
| Trial Summary                 | Negative             |
| Positive Control <sup>7</sup> | 24 ± 4.0             |

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## G06: Ames Summary Data

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## Strain: TA97

| Dose (mL/Chamber)             | Without S9 | Without S9 | Without S9           | With 10% Rat S9 | With 30% Rat S9 |
|-------------------------------|------------|------------|----------------------|-----------------|-----------------|
| Vehicle Control <sup>1</sup>  | 117 ± 4.2  | 144 ± 4.3  | 82 ± 6.4             | 181 ± 5.6       | 149 ± 8.0       |
| 0.05                          | 112 ± 6.2  | 160 ± 17.2 | 93 ± 7.1             | 177 ± 11.6      | 135 ± 5.5       |
| 0.1                           | 106 ± 3.2  | 189 ± 9.9  | 106 ± 7.4            | 187 ± 6.7       | 145 ± 4.1       |
| 0.5                           | 109 ± 2.3  | 171 ± 10.7 | 57 ± 4.3             | 179 ± 11.1      | 149 ± 3.2       |
| 1.0                           | 112 ± 23.6 | 165 ± 5.5  | 20 ± 4.0             | 184 ± 23.2      | 115 ± 8.4       |
| 2.0                           | 0 ± 0.0    | 148 ± 6.6  | 0 ± 0.0 <sup>s</sup> | 194 ± 6.0       | 0 ± 0.0         |
| Trial Summary                 | Negative   | Negative   | Negative             | Negative        | Negative        |
| Positive Control <sup>4</sup> |            |            |                      |                 |                 |
| Positive Control <sup>6</sup> |            |            |                      | 2957 ± 72.5     | 855 ± 38.0      |
| Positive Control <sup>8</sup> | 240 ± 9.7  | 811 ± 47.6 | 270 ± 17.0           |                 |                 |

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Mutagenicity

G06: Ames Summary Data  
Test Compound: 2-Pentanone  
CAS Number: 107-87-9

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Strain: TA97

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| Dose (mL/Chamber)             | With 10% Hamster S9 | With 30% Hamster S9 |
|-------------------------------|---------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 178 ± 13.2          | 148 ± 0.3           |
| 0.05                          | 183 ± 17.6          | 128 ± 2.3           |
| 0.1                           | 179 ± 10.9          | 141 ± 4.4           |
| 0.5                           | 184 ± 23.6          | 131 ± 10.2          |
| 1.0                           | 195 ± 14.1          | 107 ± 3.2           |
| 2.0                           | 168 ± 19.3          | 0 ± 0.0             |
| Trial Summary                 | Negative            | Negative            |
| Positive Control <sup>4</sup> | 1110 ± 46.6         |                     |
| Positive Control <sup>6</sup> |                     | 1051 ± 23.1         |
| Positive Control <sup>8</sup> |                     |                     |



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## Strain: TA98

| Dose (mL/Chamber)             | Without S9 | Without S9 | With 10% Rat S9 | With 30% Rat S9 | With 10% Hamster S9 |
|-------------------------------|------------|------------|-----------------|-----------------|---------------------|
| Vehicle Control <sup>1</sup>  | 20 ± 0.3   | 22 ± 4.5   | 29 ± 0.6        | 31 ± 1.2        | 21 ± 2.6            |
| 0.01                          | 13 ± 0.6   |            |                 | 21 ± 1.9        |                     |
| 0.05                          | 15 ± 1.5   | 19 ± 4.0   | 19 ± 3.7        | 29 ± 3.3        | 21 ± 1.2            |
| 0.1                           | 17 ± 1.3   | 15 ± 2.1   | 27 ± 1.2        | 25 ± 4.4        | 19 ± 4.8            |
| 0.5                           | 14 ± 1.2   | 16 ± 3.8   | 23 ± 1.8        | 22 ± 1.5        | 19 ± 1.9            |
| 1.0                           | 11 ± 1.3   | 16 ± 3.8   | 23 ± 2.9        | 18 ± 2.6        | 25 ± 5.6            |
| 2.0                           |            | 13 ± 0.6   | 13 ± 1.0        |                 | 18 ± 3.8            |
| 3.0                           |            |            |                 |                 |                     |
| 4.0                           |            |            |                 |                 |                     |
| 5.0                           |            |            |                 |                 |                     |
| Trial Summary                 | Negative   | Negative   | Negative        | Negative        | Negative            |
| Positive Control <sup>2</sup> |            |            | 714 ± 34.4      |                 | 753 ± 36.5          |
| Positive Control <sup>5</sup> |            |            |                 | 220 ± 9.5       |                     |
| Positive Control <sup>9</sup> | 169 ± 9.2  | 371 ± 3.0  |                 |                 |                     |

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Mutagenicity

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Date Report Requested: 09/12/2018  
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Strain: TA98

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| Dose (mL/Chamber)             | With 30% Hamster S9 |
|-------------------------------|---------------------|
| Vehicle Control <sup>1</sup>  | 28 ± 1.9            |
| 0.01                          | 24 ± 0.3            |
| 0.05                          | 25 ± 2.8            |
| 0.1                           | 24 ± 1.5            |
| 0.5                           | 29 ± 4.3            |
| 1.0                           | 23 ± 3.0            |
| 2.0                           |                     |
| 3.0                           |                     |
| 4.0                           |                     |
| 5.0                           |                     |
| Trial Summary                 | Negative            |
| Positive Control <sup>2</sup> |                     |
| Positive Control <sup>5</sup> | 524 ± 9.6           |
| Positive Control <sup>9</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: Air

2: 0.4 mL/Chamber 2-Aminoanthracene

3: 0.5 mL/Chamber Sodium Azide

4: 0.75 mL/Chamber 2-Aminoanthracene

5: 1.0 mL/Chamber 2-Aminoanthracene

6: 2.0 mL/Chamber 2-Aminoanthracene

7: 4.0 mL/Chamber 9-Aminoacridine

8: 24.0 mL/Chamber 9-Aminoacridine

9: 1.0 mL/Chamber 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

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