

Experiment Number: **A10575**

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

**G06: Ames Summary Data**

Test Compound: **Lactic acid**

CAS Number: **50-21-5**

Date Report Requested: **09/15/2018**

Time Report Requested: **20:27:59**

**NTP Study Number:**

A10575

**Study Result:**

Negative

Experiment Number: A10575

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: Lactic acid

CAS Number: 50-21-5

Date Report Requested: 09/15/2018

Time Report Requested: 20:27:59

## 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>  | 109 ± 4.1             | 135 ± 4.3             | 129 ± 5.5             | 125 ± 7.0              | 141 ± 8.8              |
| 100.0                         | 116 ± 6.0             | 136 ± 4.0             | 130 ± 1.0             | 119 ± 5.0              | 134 ± 7.8              |
| 333.0                         | 119 ± 2.0             | 134 ± 5.9             | 142 ± 2.1             | 121 ± 4.1              | 125 ± 6.3              |
| 1000.0                        | 115 ± 2.1             | 129 ± 8.7             | 127 ± 5.0             | 130 ± 5.2              | 131 ± 1.5              |
| 3333.0                        | 107 ± 5.9             | 117 ± 1.2             | 136 ± 8.8             | 112 ± 6.0              | 135 ± 9.4              |
| 10000.0                       | 20 ± 3.5 <sup>s</sup> | 65 ± 7.3 <sup>s</sup> | 73 ± 3.8 <sup>x</sup> | 63 ± 12.3 <sup>x</sup> | 70 ± 14.2 <sup>x</sup> |
| Trial Summary                 | Negative              | Negative              | Negative              | Negative               | Negative               |
| Positive Control <sup>2</sup> |                       |                       |                       |                        | 573 ± 12.0             |
| Positive Control <sup>3</sup> |                       |                       | 653 ± 22.8            |                        |                        |
| Positive Control <sup>4</sup> | 897 ± 12.9            | 869 ± 16.5            |                       |                        |                        |
| Positive Control <sup>5</sup> |                       |                       |                       | 818 ± 13.7             |                        |

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Strain: TA100

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| Dose (ug/Plate)               | With 30% Hamster S9    |
|-------------------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 138 ± 10.1             |
| 100.0                         | 127 ± 12.2             |
| 333.0                         | 134 ± 8.1              |
| 1000.0                        | 140 ± 10.9             |
| 3333.0                        | 134 ± 9.2              |
| 10000.0                       | 49 ± 17.2 <sup>x</sup> |
| Trial Summary                 | Negative               |
| Positive Control <sup>2</sup> |                        |
| Positive Control <sup>3</sup> | 1257 ± 49.9            |
| Positive Control <sup>4</sup> |                        |
| Positive Control <sup>5</sup> |                        |

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## G06: Ames Summary Data

Test Compound: Lactic acid

CAS Number: 50-21-5

Date Report Requested: 09/15/2018

Time Report Requested: 20:27:59

## 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>  | 11 ± 1.5             | 12 ± 2.0             | 9 ± 0.7              | 15 ± 1.2              | 11 ± 1.2             |
| 100.0                         | 14 ± 2.3             | 11 ± 1.2             | 14 ± 0.7             | 11 ± 1.5              | 10 ± 1.0             |
| 333.0                         | 17 ± 1.3             | 16 ± 2.9             | 12 ± 2.2             | 11 ± 1.3              | 13 ± 1.5             |
| 1000.0                        | 14 ± 1.0             | 9 ± 1.3              | 12 ± 1.8             | 12 ± 1.7              | 12 ± 0.7             |
| 3333.0                        | 13 ± 1.7             | 12 ± 1.2             | 12 ± 1.5             | 12 ± 1.2              | 11 ± 1.0             |
| 10000.0                       | 4 ± 1.8 <sup>x</sup> | 5 ± 0.7 <sup>s</sup> | 4 ± 2.2 <sup>x</sup> | 11 ± 0.7 <sup>x</sup> | 4 ± 0.9 <sup>x</sup> |
| Trial Summary                 | Negative             | Negative             | Negative             | Negative              | Negative             |
| Positive Control <sup>3</sup> |                      |                      |                      |                       | 127 ± 13.0           |
| Positive Control <sup>4</sup> | 945 ± 16.7           | 932 ± 18.3           |                      |                       |                      |
| Positive Control <sup>5</sup> |                      |                      | 147 ± 3.8            |                       |                      |
| Positive Control <sup>6</sup> |                      |                      |                      | 145 ± 12.7            |                      |

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G06: Ames Summary Data  
Test Compound: Lactic acid  
CAS Number: 50-21-5

Date Report Requested: 09/15/2018  
Time Report Requested: 20:27:59

Strain: TA1535

| Dose (ug/Plate)               | With 30% Hamster S9  |
|-------------------------------|----------------------|
| Vehicle Control <sup>1</sup>  | 12 ± 0.3             |
| 100.0                         | 12 ± 0.9             |
| 333.0                         | 11 ± 1.9             |
| 1000.0                        | 11 ± 1.2             |
| 3333.0                        | 15 ± 2.6             |
| 10000.0                       | 9 ± 0.3 <sup>x</sup> |
| Trial Summary                 | Negative             |
| Positive Control <sup>3</sup> |                      |
| Positive Control <sup>4</sup> |                      |
| Positive Control <sup>5</sup> | 168 ± 2.2            |
| Positive Control <sup>6</sup> |                      |

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## G06: Ames Summary Data

Test Compound: Lactic acid

CAS Number: 50-21-5

Date Report Requested: 09/15/2018

Time Report Requested: 20:27:59

## 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>  | 187 ± 4.9            | 161 ± 12.3             | 163 ± 7.8               | 194 ± 4.7              | 165 ± 14.2              |
| 100.0                         | 176 ± 5.0            | 161 ± 3.0              | 175 ± 9.0               | 206 ± 13.5             | 175 ± 9.6               |
| 333.0                         | 177 ± 5.0            | 156 ± 7.7              | 175 ± 9.0               | 207 ± 7.3              | 175 ± 8.8               |
| 1000.0                        | 173 ± 9.8            | 145 ± 23.2             | 158 ± 19.1              | 199 ± 7.9              | 159 ± 15.5              |
| 3333.0                        | 181 ± 6.8            | 157 ± 14.4             | 148 ± 5.5               | 175 ± 13.1             | 165 ± 0.9               |
| 10000.0                       | 0 ± 0.0 <sup>x</sup> | 87 ± 10.0 <sup>s</sup> | 128 ± 12.4 <sup>x</sup> | 116 ± 5.5 <sup>x</sup> | 115 ± 11.2 <sup>x</sup> |
| Trial Summary                 | Negative             | Negative               | Negative                | Negative               | Negative                |
| Positive Control <sup>2</sup> |                      |                        |                         |                        | 541 ± 22.3              |
| Positive Control <sup>3</sup> |                      |                        | 604 ± 4.3               |                        |                         |
| Positive Control <sup>5</sup> |                      |                        |                         | 532 ± 19.8             |                         |
| Positive Control <sup>7</sup> | 504 ± 34.5           | 602 ± 14.4             |                         |                        |                         |

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Test Compound: Lactic acid  
CAS Number: 50-21-5

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Strain: TA97

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| Dose (ug/Plate)               | With 30% Hamster S9    |
|-------------------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 185 ± 9.8              |
| 100.0                         | 203 ± 3.8              |
| 333.0                         | 175 ± 5.8              |
| 1000.0                        | 175 ± 10.4             |
| 3333.0                        | 191 ± 12.6             |
| 10000.0                       | 124 ± 0.3 <sup>x</sup> |
| Trial Summary                 | Negative               |
| Positive Control <sup>2</sup> |                        |
| Positive Control <sup>3</sup> | 605 ± 5.2              |
| Positive Control <sup>5</sup> |                        |
| Positive Control <sup>7</sup> |                        |

Experiment Number: A10575

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: Lactic acid

CAS Number: 50-21-5

Date Report Requested: 09/15/2018

Time Report Requested: 20:27:59

## 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>  | 26 ± 2.6             | 27 ± 0.3              | 29 ± 0.9              | 24 ± 3.3              | 24 ± 4.4              |
| 100.0                         | 18 ± 1.7             | 27 ± 0.7              | 23 ± 2.1              | 22 ± 3.0              | 30 ± 1.0              |
| 333.0                         | 17 ± 1.9             | 23 ± 3.8              | 28 ± 1.9              | 21 ± 3.2              | 28 ± 3.2              |
| 1000.0                        | 23 ± 3.5             | 28 ± 2.6              | 29 ± 2.6              | 18 ± 1.8              | 25 ± 3.8              |
| 3333.0                        | 21 ± 4.4             | 20 ± 3.8              | 24 ± 5.2              | 23 ± 3.5              | 29 ± 2.9              |
| 10000.0                       | 7 ± 0.6 <sup>s</sup> | 12 ± 0.3 <sup>s</sup> | 12 ± 1.5 <sup>x</sup> | 10 ± 3.8 <sup>x</sup> | 12 ± 1.2 <sup>x</sup> |
| Trial Summary                 | Negative             | Negative              | Negative              | Negative              | Negative              |
| Positive Control <sup>2</sup> |                      |                       |                       |                       | 425 ± 17.4            |
| Positive Control <sup>3</sup> |                      |                       | 357 ± 18.7            |                       |                       |
| Positive Control <sup>8</sup> | 375 ± 13.7           | 436 ± 18.8            |                       |                       |                       |
| Positive Control <sup>5</sup> |                      |                       |                       | 562 ± 19.7            |                       |



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Strain: TA98

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| Dose (ug/Plate)               | With 30% Hamster S9  |
|-------------------------------|----------------------|
| Vehicle Control <sup>1</sup>  | 25 ± 3.5             |
| 100.0                         | 17 ± 1.2             |
| 333.0                         | 24 ± 2.7             |
| 1000.0                        | 26 ± 1.0             |
| 3333.0                        | 24 ± 2.6             |
| 10000.0                       | 6 ± 2.3 <sup>x</sup> |
| Trial Summary                 | Negative             |
| Positive Control <sup>2</sup> |                      |
| Positive Control <sup>3</sup> | 949 ± 18.1           |
| Positive Control <sup>8</sup> |                      |
| Positive Control <sup>5</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: Water

2: 1.0 ug/Plate 2-Aminoanthracene

3: 2.0 ug/Plate 2-Aminoanthracene

4: 5.0 ug/Plate Sodium Azide

5: 5.0 ug/Plate 2-Aminoanthracene

6: 10.0 ug/Plate 2-Aminoanthracene

7: 50.0 ug/Plate 9-Aminoacridine

8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

x: Slight Toxicity and Precipitate

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