

Experiment Number: **823010**

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

**G06: Ames Summary Data**

Test Compound: **Cape aloes, powdered**

CAS Number: **EMTDP-70**

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

Time Report Requested: **18:26:46**

**NTP Study Number:**

823010

**Study Result:**

Equivocal

Experiment Number: 823010

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: Cape aloes, powdered  
CAS Number: EMTDP-70

Date Report Requested: 09/15/2018

Time Report Requested: 18:26:46

## Strain: TA100

| Dose (ug/Plate)               | Without S9              | Without S9              | With 5% Rat S9 | With 10% Rat S9       | With 10% Rat S9 |
|-------------------------------|-------------------------|-------------------------|----------------|-----------------------|-----------------|
| Vehicle Control <sup>1</sup>  | 94 ± 5.7                | 115 ± 8.4               | 89 ± 4.8       | 131 ± 11.9            | 86 ± 2.4        |
| 33.0                          |                         |                         |                |                       |                 |
| 100.0                         | 98 ± 7.0                | 109 ± 9.2               |                | 121 ± 6.2             |                 |
| 166.0                         |                         |                         |                |                       |                 |
| 333.0                         | 89 ± 6.6                | 110 ± 3.2               | 95 ± 8.2       | 139 ± 15.5            | 92 ± 4.6        |
| 666.0                         |                         |                         |                |                       |                 |
| 1000.0                        | 92 ± 6.3                | 94 ± 5.8                | 126 ± 4.9      | 149 ± 7.4             | 127 ± 6.5       |
| 1666.0                        |                         |                         | 112 ± 0.6      |                       | 133 ± 3.8       |
| 3333.0                        | 99 ± 3.1                | 107 ± 12.6              | 88 ± 10.6      | 177 ± 1.9             | 107 ± 2.9       |
| 6666.0                        |                         |                         | 41 ± 1.2       |                       | 74 ± 1.3        |
| 10000.0                       | 103 ± 10.7 <sup>P</sup> | 114 ± 17.5 <sup>P</sup> |                | 96 ± 3.7 <sup>P</sup> |                 |
| Trial Summary                 | Negative                | Negative                | Equivocal      | Equivocal             | Equivocal       |
| Positive Control <sup>2</sup> |                         |                         |                |                       |                 |
| Positive Control <sup>3</sup> |                         |                         | 593 ± 13.4     | 366 ± 9.9             | 332 ± 4.6       |
| Positive Control <sup>4</sup> |                         |                         |                |                       |                 |
| Positive Control <sup>5</sup> | 1569 ± 21.7             | 778 ± 25.1              |                |                       |                 |

Experiment Number: 823010

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: Cape aloes, powdered

CAS Number: EMTDP-70

Date Report Requested: 09/15/2018

Time Report Requested: 18:26:46

## Strain: TA100

| Dose (ug/Plate)               | With 30% Rat S9        | With 5% Hamster S9    | With 5% Hamster S9 | With 5% Hamster S9 | With 5% Hamster S9 |
|-------------------------------|------------------------|-----------------------|--------------------|--------------------|--------------------|
| Vehicle Control <sup>1</sup>  | 111 ± 6.8              | 101 ± 2.2             | 118 ± 2.1          | 90 ± 3.9           | 109 ± 9.2          |
| 33.0                          |                        |                       |                    | 95 ± 4.7           | 103 ± 5.2          |
| 100.0                         | 129 ± 4.6              |                       | 121 ± 5.2          | 96 ± 6.8           | 103 ± 11.4         |
| 166.0                         |                        |                       | 120 ± 8.6          |                    |                    |
| 333.0                         | 124 ± 6.9              |                       | 126 ± 8.5          | 103 ± 3.7          | 129 ± 9.0          |
| 666.0                         |                        |                       | 151 ± 12.1         | 109 ± 2.6          | 120 ± 7.5          |
| 1000.0                        | 129 ± 4.7              | 150 ± 6.9             | 154 ± 2.6          | 120 ± 7.9          | 128 ± 11.6         |
| 1666.0                        |                        | 135 ± 8.2             |                    | 113 ± 2.7          | 139 ± 0.9          |
| 3333.0                        | 125 ± 1.8              | 100 ± 11.2            |                    |                    |                    |
| 6666.0                        |                        | 96 ± 3.1              |                    |                    |                    |
| 10000.0                       | 132 ± 3.8 <sup>P</sup> | 86 ± 5.4 <sup>P</sup> |                    |                    |                    |
| Trial Summary                 | Negative               | Equivocal             | Equivocal          | Equivocal          | Negative           |
| Positive Control <sup>2</sup> |                        | 1458 ± 109.2          | 1058 ± 13.6        | 1170 ± 67.9        | 673 ± 24.8         |
| Positive Control <sup>3</sup> |                        |                       |                    |                    |                    |
| Positive Control <sup>4</sup> | 488 ± 9.4              |                       |                    |                    |                    |
| Positive Control <sup>5</sup> |                        |                       |                    |                    |                    |

Experiment Number: 823010  
 Test Type: Genetic Toxicology - Bacterial  
 Mutagenicity

G06: Ames Summary Data  
 Test Compound: Cape aloes, powdered  
 CAS Number: EMTDP-70

Date Report Requested: 09/15/2018  
 Time Report Requested: 18:26:46

Strain: TA100

| Dose (ug/Plate)               | With 10% Hamster S9   | With 10% Hamster S9 | With 10% Hamster S9    | With 30% Hamster S9    | With 30% Hamster S9    |
|-------------------------------|-----------------------|---------------------|------------------------|------------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 100 ± 7.4             | 98 ± 4.1            | 132 ± 4.0              | 114 ± 9.0              | 106 ± 2.2              |
| 33.0                          |                       |                     |                        |                        |                        |
| 100.0                         |                       | 127 ± 9.7           | 100 ± 10.3             | 112 ± 8.1              |                        |
| 166.0                         |                       | 119 ± 5.2           |                        |                        |                        |
| 333.0                         |                       | 130 ± 13.5          | 127 ± 7.8              | 107 ± 10.2             |                        |
| 666.0                         |                       | 142 ± 7.8           |                        |                        |                        |
| 1000.0                        | 123 ± 5.0             | 138 ± 4.4           | 152 ± 1.2              | 109 ± 7.2              | 114 ± 13.2             |
| 1666.0                        | 116 ± 4.3             |                     |                        |                        | 112 ± 7.8              |
| 3333.0                        | 131 ± 2.2             |                     | 141 ± 9.8              | 125 ± 7.5              | 139 ± 2.1              |
| 6666.0                        | 115 ± 7.3             |                     |                        |                        | 143 ± 1.5              |
| 10000.0                       | 93 ± 8.9 <sup>P</sup> |                     | 108 ± 9.4 <sup>P</sup> | 148 ± 6.5 <sup>P</sup> | 141 ± 5.4 <sup>P</sup> |
| Trial Summary                 | Negative              | Equivocal           | Negative               | Equivocal              | Equivocal              |
| Positive Control <sup>2</sup> | 856 ± 72.5            | 987 ± 39.3          | 896 ± 43.7             |                        |                        |
| Positive Control <sup>3</sup> |                       |                     |                        | 676 ± 63.4             | 696 ± 30.5             |
| Positive Control <sup>4</sup> |                       |                     |                        |                        |                        |
| Positive Control <sup>5</sup> |                       |                     |                        |                        |                        |

Experiment Number: 823010  
Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

G06: Ames Summary Data  
Test Compound: Cape aloes, powdered  
CAS Number: EMTDP-70

Date Report Requested: 09/15/2018  
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Strain: TA100

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| Dose (ug/Plate)               | With 30% Hamster S9    |
|-------------------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 130 ± 11.0             |
| 33.0                          |                        |
| 100.0                         |                        |
| 166.0                         |                        |
| 333.0                         |                        |
| 666.0                         |                        |
| 1000.0                        | 137 ± 11.3             |
| 1666.0                        | 134 ± 3.2              |
| 3333.0                        | 149 ± 7.1              |
| 6666.0                        | 152 ± 7.0              |
| 10000.0                       | 145 ± 5.7 <sup>P</sup> |
| Trial Summary                 | Negative               |
| Positive Control <sup>2</sup> |                        |
| Positive Control <sup>3</sup> | 731 ± 40.3             |
| Positive Control <sup>4</sup> |                        |
| Positive Control <sup>5</sup> |                        |

Experiment Number: 823010  
 Test Type: Genetic Toxicology - Bacterial  
 Mutagenicity

G06: Ames Summary Data  
 Test Compound: Cape aloes, powdered  
 CAS Number: EMTDP-70

Date Report Requested: 09/15/2018  
 Time Report Requested: 18:26:46

Strain: TA1535

| Dose (ug/Plate)               | Without S9           | Without S9           | With 10% Rat S9      | With 30% Rat S9      | With 5% Hamster S9 |
|-------------------------------|----------------------|----------------------|----------------------|----------------------|--------------------|
| Vehicle Control <sup>1</sup>  | 8 ± 2.3              | 8 ± 1.9              | 8 ± 1.9              | 9 ± 0.6              | 4 ± 0.7            |
| 100.0                         | 7 ± 1.5              | 7 ± 1.8              | 9 ± 1.2              | 7 ± 1.7              | 4 ± 1.2            |
| 166.0                         |                      |                      |                      |                      | 6 ± 2.0            |
| 333.0                         | 7 ± 0.9              | 6 ± 1.0              | 7 ± 0.3              | 13 ± 0.9             | 6 ± 1.0            |
| 666.0                         |                      |                      |                      |                      | 5 ± 0.9            |
| 1000.0                        | 6 ± 1.7              | 4 ± 0.7              | 6 ± 2.0              | 10 ± 3.1             | 5 ± 0.3            |
| 1666.0                        |                      |                      |                      |                      |                    |
| 3333.0                        | 10 ± 2.0             | 8 ± 0.9              | 7 ± 0.6              | 7 ± 0.7              |                    |
| 6666.0                        |                      |                      |                      |                      |                    |
| 10000.0                       | 7 ± 1.0 <sup>P</sup> | 6 ± 0.9 <sup>P</sup> | 5 ± 1.8 <sup>P</sup> | 8 ± 0.7 <sup>P</sup> |                    |
| Trial Summary                 | Negative             | Negative             | Negative             | Negative             | Negative           |
| Positive Control <sup>3</sup> |                      |                      |                      |                      | 89 ± 9.4           |
| Positive Control <sup>4</sup> |                      |                      | 64 ± 6.4             |                      |                    |
| Positive Control <sup>6</sup> |                      |                      |                      | 99 ± 3.0             |                    |
| Positive Control <sup>5</sup> | 1124 ± 72.4          | 970 ± 39.7           |                      |                      |                    |

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 Mutagenicity

G06: Ames Summary Data  
 Test Compound: Cape aloes, powdered  
 CAS Number: EMTDP-70

Date Report Requested: 09/15/2018  
 Time Report Requested: 18:26:46

Strain: TA1535

| Dose (ug/Plate)               | With 10% Hamster S9 | With 10% Hamster S9  | With 30% Hamster S9  | With 30% Hamster S9  |
|-------------------------------|---------------------|----------------------|----------------------|----------------------|
| Vehicle Control <sup>1</sup>  | 5 ± 1.8             | 9 ± 2.1              | 6 ± 1.5              | 8 ± 0.6              |
| 100.0                         | 7 ± 0.3             | 9 ± 0.3              |                      | 7 ± 1.7              |
| 166.0                         | 4 ± 1.2             |                      |                      |                      |
| 333.0                         | 8 ± 1.2             | 8 ± 1.2              |                      | 7 ± 2.0              |
| 666.0                         | 8 ± 1.2             |                      |                      |                      |
| 1000.0                        | 5 ± 0.7             | 10 ± 1.5             | 7 ± 0.7              | 5 ± 1.5              |
| 1666.0                        |                     |                      | 6 ± 2.6              |                      |
| 3333.0                        |                     | 8 ± 0.9              | 6 ± 1.9              | 7 ± 1.3              |
| 6666.0                        |                     |                      | 7 ± 0.7              |                      |
| 10000.0                       |                     | 7 ± 1.5 <sup>P</sup> | 9 ± 1.7 <sup>P</sup> | 6 ± 1.8 <sup>P</sup> |
| Trial Summary                 | Negative            | Negative             | Negative             | Negative             |
| Positive Control <sup>3</sup> | 68 ± 5.6            | 78 ± 4.7             |                      |                      |
| Positive Control <sup>4</sup> |                     |                      | 109 ± 16.1           | 233 ± 13.3           |
| Positive Control <sup>6</sup> |                     |                      |                      |                      |
| Positive Control <sup>5</sup> |                     |                      |                      |                      |

Experiment Number: 823010  
 Test Type: Genetic Toxicology - Bacterial  
 Mutagenicity

G06: Ames Summary Data  
 Test Compound: Cape aloes, powdered  
 CAS Number: EMTDP-70

Date Report Requested: 09/15/2018  
 Time Report Requested: 18:26:46

Strain: TA97

| Dose (ug/Plate)               | Without S9             | Without S9              | Without S9              | With 10% Rat S9         | With 30% Rat S9        |
|-------------------------------|------------------------|-------------------------|-------------------------|-------------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 176 ± 18.7             | 167 ± 5.9               | 165 ± 3.7               | 178 ± 6.4               | 210 ± 10.2             |
| 100.0                         | 165 ± 10.8             | 145 ± 9.8               |                         | 172 ± 21.7              | 224 ± 6.4              |
| 333.0                         | 165 ± 12.0             | 169 ± 2.7               | 171 ± 5.8               | 200 ± 9.3               | 202 ± 4.6              |
| 1000.0                        | 175 ± 2.1              | 151 ± 14.3              | 172 ± 6.2               | 194 ± 1.8               | 218 ± 19.8             |
| 3333.0                        | 197 ± 4.3              | 173 ± 24.8              | 168 ± 7.9               | 175 ± 7.4               | 218 ± 12.0             |
| 6666.0                        |                        |                         | 179 ± 1.5               |                         |                        |
| 10000.0                       | 226 ± 9.2 <sup>p</sup> | 304 ± 12.8 <sup>p</sup> | 148 ± 29.8 <sup>p</sup> | 152 ± 25.5 <sup>p</sup> | 213 ± 5.8 <sup>p</sup> |
| Trial Summary                 | Negative               | Equivocal               | Negative                | Negative                | Negative               |
| Positive Control <sup>2</sup> |                        |                         |                         |                         |                        |
| Positive Control <sup>3</sup> |                        |                         |                         | 309 ± 1.2               |                        |
| Positive Control <sup>4</sup> |                        |                         |                         |                         | 349 ± 35.1             |
| Positive Control <sup>7</sup> | 385 ± 15.8             | 398 ± 7.5               | 410 ± 8.5               |                         |                        |



Experiment Number: 823010  
Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

G06: Ames Summary Data  
Test Compound: Cape aloes, powdered  
CAS Number: EMTDP-70

Date Report Requested: 09/15/2018  
Time Report Requested: 18:26:46

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Strain: TA97

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| Dose (ug/Plate)               | With 10% Hamster S9    | With 30% Hamster S9    |
|-------------------------------|------------------------|------------------------|
| Vehicle Control <sup>1</sup>  | 176 ± 1.0              | 193 ± 13.1             |
| 100.0                         | 163 ± 2.0              | 188 ± 13.3             |
| 333.0                         | 171 ± 2.8              | 164 ± 16.7             |
| 1000.0                        | 182 ± 8.7              | 191 ± 9.4              |
| 3333.0                        | 187 ± 5.9              | 190 ± 9.2              |
| 6666.0                        |                        |                        |
| 10000.0                       | 175 ± 2.3 <sup>p</sup> | 172 ± 0.9 <sup>p</sup> |
| Trial Summary                 | Negative               | Negative               |
| Positive Control <sup>2</sup> | 402 ± 82.7             |                        |
| Positive Control <sup>3</sup> |                        | 470 ± 25.1             |
| Positive Control <sup>4</sup> |                        |                        |
| Positive Control <sup>7</sup> |                        |                        |

Experiment Number: 823010  
 Test Type: Genetic Toxicology - Bacterial  
 Mutagenicity

**G06: Ames Summary Data**  
 Test Compound: Cape aloes, powdered  
 CAS Number: EMTDP-70

Date Report Requested: 09/15/2018  
 Time Report Requested: 18:26:46

**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>  | 19 ± 3.8              | 19 ± 3.3              | 40 ± 2.4              | 34 ± 3.2              | 24 ± 2.6              |
| 100.0                         | 23 ± 2.1              | 21 ± 3.6              | 36 ± 3.8              | 28 ± 2.5              | 22 ± 2.7              |
| 333.0                         | 25 ± 0.7              | 23 ± 2.3              | 37 ± 4.3              | 24 ± 1.9              | 23 ± 3.5              |
| 1000.0                        | 25 ± 3.8              | 18 ± 5.7              | 43 ± 2.3              | 21 ± 1.3              | 28 ± 1.2              |
| 3333.0                        | 17 ± 0.9              | 19 ± 2.7              | 41 ± 1.7              | 30 ± 3.6              | 25 ± 2.3              |
| 10000.0                       | 23 ± 3.2 <sup>p</sup> | 29 ± 3.8 <sup>p</sup> | 22 ± 4.2 <sup>p</sup> | 40 ± 2.1 <sup>p</sup> | 21 ± 3.3 <sup>p</sup> |
| Trial Summary                 | Negative              | Negative              | Negative              | Negative              | Negative              |
| Positive Control <sup>2</sup> |                       |                       |                       |                       | 935 ± 75.1            |
| Positive Control <sup>3</sup> |                       |                       | 286 ± 7.8             | 122 ± 12.8            |                       |
| Positive Control <sup>8</sup> | 557 ± 17.4            | 548 ± 27.7            |                       |                       |                       |

Experiment Number: 823010  
Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

G06: Ames Summary Data  
Test Compound: Cape aloes, powdered  
CAS Number: EMTDP-70

Date Report Requested: 09/15/2018  
Time Report Requested: 18:26:46

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Strain: TA98

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| Dose (ug/Plate)               | With 30% Hamster S9   |
|-------------------------------|-----------------------|
| Vehicle Control <sup>1</sup>  | 29 ± 0.6              |
| 100.0                         | 34 ± 2.2              |
| 333.0                         | 27 ± 4.8              |
| 1000.0                        | 30 ± 1.7              |
| 3333.0                        | 28 ± 2.4              |
| 10000.0                       | 24 ± 1.5 <sup>p</sup> |
| Trial Summary                 | Negative              |
| Positive Control <sup>2</sup> |                       |
| Positive Control <sup>3</sup> | 308 ± 22.2            |
| Positive Control <sup>8</sup> |                       |

Experiment Number: **823010**  
Test Type: **Genetic Toxicology - Bacterial Mutagenicity**

**G06: Ames Summary Data**  
Test Compound: **Cape aloes, powdered**  
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Date Report Requested: **09/15/2018**  
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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: 2.5 ug/Plate 2-Aminoanthracene
- 5: 5.0 ug/Plate Sodium Azide
- 6: 5.0 ug/Plate 2-Aminoanthracene
- 7: 50.0 ug/Plate 9-Aminoacridine
- 8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
- p: Precipitate

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