

Experiment Number: 703371

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

**G06: Ames Summary Data**

Test Compound: **Theophylline**

CAS Number: **58-55-9**

Date Report Requested: **09/12/2018**

Time Report Requested: **12:47:47**

**NTP Study Number:**

703371

**Study Result:**

Negative

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**Strain: TA100**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 30% Rat S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	92 ± 0.9	150 ± 8.8	158 ± 6.4	172 ± 5.2	143 ± 11.8
100.0	101 ± 8.7	141 ± 11.3	144 ± 7.6	168 ± 14.2	149 ± 9.2
333.0	96 ± 12.5	137 ± 6.2	157 ± 7.0	150 ± 9.3	137 ± 2.8
1000.0	93 ± 3.8	155 ± 8.0	148 ± 11.5	168 ± 9.2	138 ± 9.8
3333.0	87 ± 10.9	138 ± 1.3	149 ± 7.8	144 ± 8.2	145 ± 12.7
10000.0	66 ± 3.7	112 ± 19.1	133 ± 14.2	161 ± 7.3	125 ± 7.6
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>	437 ± 5.5	431 ± 12.4			
Positive Control <sup>3</sup>			614 ± 39.7	548 ± 19.5	1245 ± 92.4

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**Strain: TA100**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	167 ± 10.0
100.0	168 ± 5.0
333.0	180 ± 1.2
1000.0	169 ± 5.3
3333.0	149 ± 5.0
10000.0	156 ± 16.6
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	1068 ± 37.2

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**Strain: TA1535**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 30% Rat S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	38 ± 2.0	44 ± 3.2	10 ± 1.5	11 ± 0.7	11 ± 2.7
100.0	33 ± 3.2	42 ± 3.2	9 ± 1.7	11 ± 1.2	8 ± 0.9
333.0	34 ± 4.3	37 ± 3.5	10 ± 2.1	12 ± 2.0	10 ± 1.7
1000.0	29 ± 0.7	31 ± 3.3	9 ± 0.9	12 ± 3.2	9 ± 0.7
3333.0	24 ± 3.2	33 ± 3.8	8 ± 1.8	10 ± 2.1	7 ± 0.7
10000.0	13 ± 6.1	25 ± 4.4	5 ± 0.9	5 ± 0.3	6 ± 0.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>	435 ± 9.3	426 ± 36.3			
Positive Control <sup>4</sup>			215 ± 9.9	161 ± 9.2	498 ± 12.2

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**G06: Ames Summary Data**

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CAS Number: 58-55-9

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**Strain: TA1535**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	16 ± 3.5
100.0	13 ± 2.0
333.0	11 ± 2.4
1000.0	14 ± 2.0
3333.0	10 ± 0.9
10000.0	10 ± 2.1
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>4</sup>	488 ± 69.8

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Test Type: Genetic Toxicology - Bacterial  
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## G06: Ames Summary Data

Test Compound: Theophylline

CAS Number: 58-55-9

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## 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>	147 ± 6.2	172 ± 12.9	191 ± 17.6	199 ± 9.2	142 ± 14.3
100.0	131 ± 2.3	209 ± 1.9	179 ± 0.9	257 ± 6.4	144 ± 3.8
333.0	127 ± 8.3	200 ± 12.2	168 ± 7.3	226 ± 4.2	139 ± 10.5
1000.0	130 ± 11.2	171 ± 17.3	193 ± 9.0	231 ± 7.2	140 ± 17.6
3333.0	125 ± 7.3	184 ± 3.0	172 ± 5.5	179 ± 11.4	131 ± 11.6
10000.0	81 ± 4.2	132 ± 13.5	143 ± 11.5	170 ± 15.9	119 ± 9.3
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>4</sup>			1213 ± 19.9	720 ± 144.2	1748 ± 53.5
Positive Control <sup>5</sup>	1058 ± 81.4	1622 ± 145.8			

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**Strain: TA97**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	184 ± 12.0
100.0	212 ± 7.1
333.0	198 ± 6.1
1000.0	201 ± 8.8
3333.0	198 ± 1.7
10000.0	185 ± 9.4
Trial Summary	Negative
Positive Control <sup>4</sup>	1723 ± 44.3
Positive Control <sup>5</sup>	

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**Strain: TA98**

<b>Dose (ug/Plate)</b>	<b>Without S9</b>	<b>Without S9</b>	<b>With 10% Rat S9</b>	<b>With 30% Rat S9</b>	<b>With 10% Hamster S9</b>
Vehicle Control <sup>1</sup>	16 ± 3.5	19 ± 2.7	27 ± 2.6	39 ± 3.3	27 ± 1.2
100.0	20 ± 1.5	21 ± 4.8	26 ± 2.6	32 ± 4.1	26 ± 2.9
333.0	18 ± 1.3	20 ± 2.1	29 ± 5.0	35 ± 3.9	29 ± 1.2
1000.0	12 ± 1.8	19 ± 3.8	27 ± 2.4	32 ± 4.9	33 ± 3.9
3333.0	16 ± 2.3	16 ± 1.5	26 ± 5.5	21 ± 2.6	26 ± 3.9
10000.0	9 ± 1.9	16 ± 2.0	18 ± 0.6	26 ± 3.0	21 ± 0.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>3</sup>			333 ± 11.8	225 ± 18.4	959 ± 17.6
Positive Control <sup>6</sup>	619 ± 41.0	562 ± 16.2			



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**Strain: TA98**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	32 ± 3.7
100.0	34 ± 1.5
333.0	44 ± 1.7
1000.0	37 ± 4.3
3333.0	28 ± 3.5
10000.0	31 ± 0.6
Trial Summary	Negative
Positive Control <sup>3</sup>	410 ± 27.5
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 Sodium Azide

3: 1.0 ug/Plate 2-Aminoanthracene

4: 2.5 ug/Plate 2-Aminoanthracene

5: 50.0 ug/Plate 9-Aminoacridine

6: 5.0 ug/Plate 4-Nitro-O-Phenylenediamine

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