

Experiment Number: A64894

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: 6-Thioguanine (6-TG)

CAS Number: 154-42-7

Date Report Requested: 09/17/2018

Time Report Requested: 13:04:41

**NTP Study Number:**

A64894

**Study Result:**

Negative

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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>	167 ± 16.3	116 ± 4.0	131 ± 2.7	161 ± 8.1	138 ± 5.8
100.0	146 ± 6.8	116 ± 4.4	140 ± 11.8	150 ± 5.7	132 ± 8.9
333.0	129 ± 7.0	114 ± 3.0	138 ± 5.5	168 ± 5.6	135 ± 11.6
1000.0	128 ± 3.8	113 ± 2.0	134 ± 2.7	140 ± 4.7	143 ± 9.0
3333.0	100 ± 4.0	111 ± 4.8	123 ± 3.1	151 ± 3.5	135 ± 9.8
6666.0	129 ± 13.5	118 ± 1.0			
10000.0			139 ± 11.5	80 ± 9.0	138 ± 9.1
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					546 ± 25.6
Positive Control <sup>3</sup>			355 ± 17.9		
Positive Control <sup>4</sup>	943 ± 20.4	926 ± 52.5			
Positive Control <sup>5</sup>				1096 ± 52.9	

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Strain: TA100

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	166 ± 6.5
100.0	161 ± 8.4
333.0	146 ± 5.7
1000.0	155 ± 7.5
3333.0	152 ± 16.8
6666.0	
10000.0	99 ± 7.6
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	954 ± 6.5
Positive Control <sup>4</sup>	
Positive Control <sup>5</sup>	

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## 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>	13 ± 1.0	17 ± 1.3	19 ± 0.6	18 ± 1.2	18 ± 0.6
100.0	17 ± 3.6	20 ± 4.1	18 ± 0.7	18 ± 4.0	16 ± 0.9
333.0	17 ± 2.4	24 ± 4.0	15 ± 1.3	20 ± 3.2	15 ± 2.2
1000.0	14 ± 0.6	22 ± 3.8	19 ± 1.2	17 ± 2.4	14 ± 2.9
3333.0	15 ± 1.8	21 ± 3.6	18 ± 1.9	16 ± 3.3	19 ± 0.6
6666.0	8 ± 1.8	8 ± 0.3			
10000.0			14 ± 0.9	12 ± 1.2	15 ± 0.3
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>3</sup>					102 ± 3.0
Positive Control <sup>5</sup>			107 ± 4.1		
Positive Control <sup>4</sup>	851 ± 7.9	859 ± 24.8			
Positive Control <sup>6</sup>				222 ± 6.6	

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Strain: TA1535

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	14 ± 0.6
100.0	13 ± 2.6
333.0	14 ± 1.0
1000.0	14 ± 3.0
3333.0	18 ± 0.9
6666.0	
10000.0	13 ± 1.5
Trial Summary	Negative
Positive Control <sup>3</sup>	
Positive Control <sup>5</sup>	321 ± 15.1
Positive Control <sup>4</sup>	
Positive Control <sup>6</sup>	

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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>	129 ± 9.6	141 ± 9.1	166 ± 5.3	175 ± 2.0	155 ± 23.9
100.0	84 ± 2.3	139 ± 12.7	160 ± 7.8	176 ± 12.5	166 ± 4.0
333.0	122 ± 7.5	163 ± 2.7	164 ± 5.8	164 ± 3.2	163 ± 2.6
1000.0	98 ± 3.0	159 ± 5.7	171 ± 11.9	163 ± 7.4	169 ± 6.2
3333.0	112 ± 4.8	165 ± 14.4	152 ± 6.3	168 ± 3.3	157 ± 5.8
6666.0	99 ± 0.6 <sup>s</sup>	154 ± 2.9			
10000.0			168 ± 11.0	180 ± 3.9	180 ± 3.8
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					533 ± 14.6
Positive Control <sup>3</sup>			436 ± 20.4		
Positive Control <sup>5</sup>				435 ± 23.4	
Positive Control <sup>7</sup>		381 ± 8.0			
Positive Control <sup>8</sup>	426 ± 13.0				

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Strain: TA97

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	182 ± 7.9
100.0	168 ± 11.3
333.0	167 ± 10.7
1000.0	174 ± 13.3
3333.0	177 ± 6.0
6666.0	
10000.0	171 ± 10.8
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	481 ± 18.2
Positive Control <sup>5</sup>	
Positive Control <sup>7</sup>	
Positive Control <sup>8</sup>	

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## 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>	18 ± 5.2	14 ± 2.3	20 ± 2.3	23 ± 1.5	19 ± 0.3
100.0	11 ± 2.3	12 ± 2.6	12 ± 0.6	14 ± 0.3	17 ± 0.6
333.0	11 ± 2.3	15 ± 0.6	9 ± 1.9	16 ± 1.8	13 ± 1.0
1000.0	13 ± 1.3	18 ± 0.6	14 ± 1.0	10 ± 1.9	15 ± 1.5
3333.0	10 ± 1.2	17 ± 1.5	13 ± 0.3	12 ± 0.9	17 ± 1.5
6666.0	7 ± 0.7	11 ± 0.6			
10000.0			7 ± 1.2	6 ± 1.5	16 ± 0.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					489 ± 11.1
Positive Control <sup>3</sup>			302 ± 3.0		
Positive Control <sup>9</sup>	373 ± 6.7	293 ± 5.6			
Positive Control <sup>5</sup>				641 ± 25.0	



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Strain: TA98

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	19 ± 4.0
100.0	15 ± 1.3
333.0	16 ± 1.0
1000.0	12 ± 1.7
3333.0	10 ± 0.9
6666.0	
10000.0	5 ± 0.0
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	362 ± 28.2
Positive Control <sup>9</sup>	
Positive Control <sup>5</sup>	

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## Strain: TA102

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	177 ± 10.1	198 ± 12.9	241 ± 10.0	274 ± 15.1	257 ± 17.3
100.0	211 ± 7.6	170 ± 14.7	227 ± 2.3	282 ± 12.0	230 ± 8.2
333.0	193 ± 5.4	171 ± 23.2	263 ± 31.3	246 ± 15.9	273 ± 20.9
1000.0	165 ± 9.1	161 ± 7.2	255 ± 19.0	248 ± 13.0	215 ± 3.4
3333.0	163 ± 13.7	175 ± 8.0	251 ± 9.4	209 ± 3.4	213 ± 9.4
6666.0	184 ± 5.2				
10000.0		164 ± 29.0	269 ± 30.0	229 ± 10.2	232 ± 34.4
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>10</sup>		722 ± 33.8			
Positive Control <sup>11</sup>	651 ± 15.4				
Positive Control <sup>5</sup>					1176 ± 28.6
Positive Control <sup>6</sup>			1060 ± 20.9	635 ± 2.3	

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Strain: TA102

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	252 ± 4.1
100.0	285 ± 12.5
333.0	271 ± 7.2
1000.0	246 ± 17.9
3333.0	234 ± 7.2
6666.0	
10000.0	243 ± 13.0
Trial Summary	Negative
Positive Control <sup>10</sup>	
Positive Control <sup>11</sup>	
Positive Control <sup>5</sup>	618 ± 20.0
Positive Control <sup>6</sup>	

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## Strain: TA104

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	214 ± 2.6	347 ± 26.6	455 ± 9.2	343 ± 29.2	411 ± 13.0
100.0	213 ± 17.1	342 ± 20.1	437 ± 3.1	281 ± 18.7	425 ± 24.7
333.0	205 ± 16.9	326 ± 13.6	466 ± 14.0	282 ± 10.7	462 ± 12.0
1000.0	187 ± 15.9	354 ± 21.2	461 ± 15.4	286 ± 8.0	425 ± 2.1
3333.0	207 ± 25.1	325 ± 17.5	446 ± 17.3	279 ± 16.4	437 ± 8.0
6666.0	191 ± 9.6				
10000.0		184 ± 11.0 <sup>s</sup>	386 ± 8.8	258 ± 35.5	430 ± 25.4
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>12</sup>					971 ± 12.2
Positive Control <sup>5</sup>			943 ± 24.3	667 ± 14.1	
Positive Control <sup>13</sup>	734 ± 13.5	844 ± 8.2			

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Strain: TA104

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	288 ± 32.4
100.0	278 ± 7.1
333.0	282 ± 11.0
1000.0	272 ± 5.4
3333.0	256 ± 23.0
6666.0	
10000.0	232 ± 23.9
Trial Summary	Negative
Positive Control <sup>12</sup>	639 ± 29.4
Positive Control <sup>5</sup>	
Positive Control <sup>13</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: 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: 50.0 ug/Plate 2-Aminoanthracene
- 9: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
- 10: 0.5 ug/Plate Methyl Methane Sulfonate
- 11: 0.5 ug/Plate Mitomycin-C
- 12: 2.5 ug/Plate 2-Aminoanthracene
- 13: 250.0 ug/Plate Methyl Methane Sulfonate
- s: Slight Toxicity

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