

Experiment Number: **A92678**

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

**G06: Ames Summary Data**

Test Compound: **Apigenin**

CAS Number: **520-36-5**

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

Time Report Requested: **12:29:56**

**NTP Study Number:**

A92678

**Study Result:**

Negative

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 CAS Number: 520-36-5

Date Report Requested: 09/15/2018  
 Time Report Requested: 12:29:56

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>	172 ± 5.7	183 ± 16.8	186 ± 9.5	187 ± 7.9	194 ± 6.5
100.0	166 ± 7.5	162 ± 4.3	201 ± 15.7	245 ± 3.6	188 ± 15.6
333.0	174 ± 8.8	166 ± 17.9	222 ± 22.6	199 ± 24.8	182 ± 1.9
1000.0	99 ± 2.8 <sup>x</sup>	214 ± 5.9 <sup>p</sup>	239 ± 10.7 <sup>p</sup>	126 ± 11.8 <sup>p</sup>	193 ± 6.7 <sup>p</sup>
3333.0	101 ± 13.2 <sup>x</sup>	217 ± 2.0 <sup>p</sup>	224 ± 5.4 <sup>p</sup>	130 ± 10.8 <sup>x</sup>	179 ± 6.4 <sup>p</sup>
10000.0	73 ± 8.6 <sup>x</sup>	214 ± 0.9 <sup>p</sup>	213 ± 8.6 <sup>p</sup>	83 ± 6.1 <sup>x</sup>	186 ± 3.0 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					833 ± 28.9
Positive Control <sup>3</sup>	646 ± 4.2	434 ± 14.4			
Positive Control <sup>4</sup>			485 ± 11.5		
Positive Control <sup>5</sup>					
Positive Control <sup>6</sup>				987 ± 28.0	

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Strain: TA100

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	171 ± 5.9
100.0	179 ± 7.8
333.0	169 ± 6.6
1000.0	137 ± 13.7 <sup>P</sup>
3333.0	100 ± 4.0 <sup>P</sup>
10000.0	92 ± 3.5 <sup>P</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	
Positive Control <sup>4</sup>	
Positive Control <sup>5</sup>	958 ± 50.3
Positive Control <sup>6</sup>	

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## G06: Ames Summary Data

Test Compound: Apigenin

CAS Number: 520-36-5

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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>	14 ± 3.4	13 ± 1.8	10 ± 3.3	12 ± 2.8	8 ± 0.7
100.0	12 ± 1.9	9 ± 0.3	12 ± 2.6	11 ± 1.8	9 ± 2.3
333.0	9 ± 1.5	11 ± 1.8	12 ± 4.1	10 ± 1.2	7 ± 1.7
1000.0	10 ± 1.5 <sup>P</sup>	12 ± 1.7 <sup>P</sup>	9 ± 0.3 <sup>P</sup>	9 ± 0.7 <sup>P</sup>	7 ± 1.5 <sup>P</sup>
3333.0	9 ± 0.3 <sup>X</sup>	10 ± 0.6 <sup>P</sup>	6 ± 0.9 <sup>P</sup>	10 ± 2.8 <sup>X</sup>	6 ± 0.6 <sup>P</sup>
10000.0	5 ± 0.9 <sup>X</sup>	12 ± 0.6 <sup>P</sup>	7 ± 1.2 <sup>P</sup>	6 ± 1.2 <sup>X</sup>	7 ± 1.5 <sup>P</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					350 ± 6.7
Positive Control <sup>3</sup>	240 ± 23.6	217 ± 16.2			
Positive Control <sup>5</sup>					
Positive Control <sup>6</sup>			117 ± 4.4	109 ± 14.9	

Experiment Number: A92678

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G06: Ames Summary Data

Test Compound: Apigenin

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Strain: TA1535

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	9 ± 0.6
100.0	10 ± 2.2
333.0	12 ± 0.7
1000.0	11 ± 1.2 <sup>x</sup>
3333.0	7 ± 1.2 <sup>x</sup>
10000.0	4 ± 1.2 <sup>x</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	
Positive Control <sup>5</sup>	152 ± 13.8
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 30% Rat S9
Vehicle Control <sup>1</sup>	86 ± 9.0	111 ± 14.7	149 ± 21.9	125 ± 10.0	167 ± 8.0
33.0					153 ± 14.0
100.0	83 ± 4.3	122 ± 16.5	152 ± 21.3	180 ± 3.2	188 ± 4.5
333.0	78 ± 3.8	118 ± 11.0	165 ± 14.7	189 ± 11.9	195 ± 13.5 <sup>P</sup>
500.0					190 ± 6.1 <sup>P</sup>
1000.0	75 ± 1.5 <sup>P</sup>	144 ± 11.4 <sup>P</sup>	184 ± 7.5 <sup>P</sup>	132 ± 13.1 <sup>P</sup>	179 ± 6.0 <sup>P</sup>
3333.0	62 ± 0.9 <sup>X</sup>	166 ± 4.2 <sup>P</sup>	188 ± 2.8 <sup>P</sup>	113 ± 3.5 <sup>X</sup>	
10000.0	53 ± 2.5 <sup>X</sup>	165 ± 1.9 <sup>P</sup>	189 ± 5.5 <sup>P</sup>	93 ± 7.5 <sup>X</sup>	
Trial Summary	Negative	Negative	Negative	Equivocal	Negative
Positive Control <sup>4</sup>					
Positive Control <sup>6</sup>			1058 ± 361.4	577 ± 45.2	336 ± 7.0
Positive Control <sup>7</sup>	508 ± 34.7	613 ± 28.5			

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Strain: TA97

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	135 ± 6.6	102 ± 7.1
33.0		
100.0	145 ± 16.7	101 ± 6.7
333.0	120 ± 9.8	94 ± 13.7
500.0		
1000.0	143 ± 5.4 <sup>P</sup>	83 ± 1.7 <sup>P</sup>
3333.0	133 ± 4.1 <sup>P</sup>	78 ± 1.2 <sup>X</sup>
10000.0	140 ± 4.4 <sup>P</sup>	66 ± 5.8 <sup>X</sup>
Trial Summary	Negative	Negative
Positive Control <sup>4</sup>	1105 ± 60.0	
Positive Control <sup>6</sup>		1223 ± 110.2
Positive Control <sup>7</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>	13 ± 1.5	10 ± 0.3	14 ± 0.9	26 ± 3.1	15 ± 2.0
100.0	13 ± 1.5	14 ± 1.8	14 ± 4.1	23 ± 2.3	19 ± 1.3
333.0	12 ± 1.3 <sup>p</sup>	11 ± 1.2	13 ± 1.3	29 ± 1.5	18 ± 1.2
1000.0	7 ± 1.2 <sup>p</sup>	14 ± 2.2 <sup>p</sup>	13 ± 5.2 <sup>p</sup>	20 ± 4.7 <sup>p</sup>	18 ± 3.2 <sup>p</sup>
3333.0	4 ± 0.3 <sup>p</sup>	9 ± 1.5 <sup>p</sup>	13 ± 1.0 <sup>p</sup>	18 ± 2.3 <sup>p</sup>	16 ± 1.8 <sup>p</sup>
10000.0	4 ± 0.3 <sup>p</sup>	9 ± 0.9 <sup>p</sup>	8 ± 0.7 <sup>p</sup>	7 ± 1.5 <sup>p</sup>	16 ± 2.3 <sup>p</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>			222 ± 2.9		844 ± 50.7
Positive Control <sup>8</sup>	104 ± 9.9	111 ± 19.8			
Positive Control <sup>5</sup>				570 ± 41.2	



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Strain: TA98

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	22 ± 2.6
100.0	26 ± 4.8
333.0	24 ± 5.5
1000.0	16 ± 1.0 <sup>P</sup>
3333.0	11 ± 1.3 <sup>P</sup>
10000.0	7 ± 0.7 <sup>P</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>8</sup>	
Positive Control <sup>5</sup>	814 ± 32.8

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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: 0.4 ug/Plate 2-Aminoanthracene

3: 0.5 ug/Plate Sodium Azide

4: 0.75 ug/Plate 2-Aminoanthracene

5: 1.0 ug/Plate 2-Aminoanthracene

6: 2.0 ug/Plate 2-Aminoanthracene

7: 24.0 ug/Plate 9-Aminoacridine

8: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

p: Precipitate

x: Slight Toxicity and Precipitate

\*\* END OF REPORT \*\*