

Experiment Number: A16457

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

G06: Ames Summary Data

Test Compound: **Ginseng**

CAS Number: **50647-08-0**

Date Report Requested: **09/16/2018**

Time Report Requested: **01:46:17**

NTP Study Number:

A16457

Study Result:

Negative

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G06: Ames Summary Data

Test Compound: Ginseng

CAS Number: 50647-08-0

Date Report Requested: 09/16/2018

Time Report Requested: 01:46:17

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	101 ± 6.9	97 ± 2.3	95 ± 4.5	81 ± 3.0	89 ± 1.0
33.0	102 ± 2.3	95 ± 2.6	88 ± 4.9	84 ± 3.9	88 ± 0.9
100.0	106 ± 2.0	93 ± 2.9	97 ± 2.7	71 ± 2.3	92 ± 2.4
333.0	104 ± 4.9	97 ± 0.9	87 ± 5.1	89 ± 4.2	98 ± 2.6
1000.0	97 ± 3.2 ^P	88 ± 3.2 ^P	97 ± 5.5	75 ± 2.3 ^P	98 ± 8.3 ^P
3333.0	88 ± 3.8 ^X	92 ± 2.1 ^P	103 ± 6.0 ^P	67 ± 2.8 ^X	115 ± 10.5 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					483 ± 77.4
Positive Control ³	211 ± 3.6	285 ± 10.1			
Positive Control ⁴			456 ± 21.2		
Positive Control ⁵					
Positive Control ⁶				341 ± 16.0	

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Date Report Requested: 09/16/2018
Time Report Requested: 01:46:17

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	84 ± 12.5
33.0	78 ± 2.6
100.0	97 ± 0.3
333.0	79 ± 4.4
1000.0	68 ± 2.3 ^p
3333.0	67 ± 9.6 ^p
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	236 ± 14.8
Positive Control ⁶	

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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 ¹	16 ± 0.3	8 ± 0.9	12 ± 1.5	13 ± 3.0	10 ± 1.2
33.0	19 ± 2.9	10 ± 2.0	12 ± 2.9	14 ± 1.5	10 ± 1.5
100.0	15 ± 3.0	11 ± 2.6	9 ± 1.5	12 ± 1.0	10 ± 2.1
333.0	15 ± 3.5	8 ± 0.3	14 ± 1.9	11 ± 0.7	9 ± 2.0
1000.0	13 ± 0.3	9 ± 2.0 ^p	8 ± 0.3	11 ± 0.9	9 ± 1.2 ^p
3333.0	12 ± 0.9 ^p	8 ± 2.3 ^p	13 ± 1.5 ^p	16 ± 3.5 ^p	7 ± 1.2 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					66 ± 2.3
Positive Control ³	204 ± 8.7	175 ± 9.4			
Positive Control ⁵					
Positive Control ⁶			138 ± 17.6	107 ± 24.5	

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CAS Number: 50647-08-0

Date Report Requested: 09/16/2018
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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	14 ± 1.5
33.0	14 ± 0.6
100.0	11 ± 0.6
333.0	16 ± 2.5
1000.0	11 ± 1.5
3333.0	9 ± 1.7 ^P
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	212 ± 16.7
Positive Control ⁶	

Experiment Number: A16457

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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 ¹	121 ± 13.5	94 ± 3.8	111 ± 5.2	199 ± 20.4	116 ± 2.3
33.0	131 ± 2.4	97 ± 7.8	117 ± 4.8	173 ± 14.0	125 ± 8.1
100.0	123 ± 6.2	101 ± 1.5	123 ± 5.0	185 ± 3.8	108 ± 3.8
333.0	130 ± 15.2	97 ± 6.4	122 ± 4.6	198 ± 14.0	116 ± 12.8
1000.0	127 ± 6.8	86 ± 3.5 ^p	121 ± 3.4	160 ± 15.9	113 ± 10.0 ^p
3333.0	124 ± 6.9 ^x	83 ± 1.3 ^p	97 ± 1.5 ^p	156 ± 2.3 ^p	89 ± 7.6 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					691 ± 195.7
Positive Control ⁶			1379 ± 129.9	613 ± 37.3	
Positive Control ⁷	246 ± 22.1	357 ± 50.0			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	148 ± 9.5
33.0	159 ± 9.2
100.0	161 ± 15.7
333.0	163 ± 8.7
1000.0	138 ± 8.5
3333.0	155 ± 8.7 ^P
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	858 ± 74.5
Positive Control ⁷	

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Date Report Requested: 09/16/2018

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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 ¹	25 ± 2.3	12 ± 0.7	14 ± 1.2	22 ± 2.2	13 ± 0.7
33.0	23 ± 0.7	11 ± 2.0	12 ± 1.2	21 ± 1.5	14 ± 1.2
100.0	22 ± 4.2	12 ± 0.3	10 ± 1.2	23 ± 0.9	12 ± 1.2
333.0	22 ± 2.8	13 ± 1.9	14 ± 2.3	25 ± 1.2	13 ± 2.1
1000.0	17 ± 1.5 ^p	15 ± 1.7 ^p	11 ± 2.3	17 ± 0.6 ^p	18 ± 0.9 ^p
3333.0	17 ± 3.3 ^p	12 ± 1.9 ^p	15 ± 0.3 ^p	18 ± 2.7 ^p	17 ± 2.3 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			189 ± 11.5		465 ± 89.8
Positive Control ⁵				84 ± 12.0	
Positive Control ⁸	65 ± 3.9	121 ± 13.5			

Experiment Number: A16457

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G06: Ames Summary Data

Test Compound: Ginseng

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	17 ± 1.2
33.0	20 ± 2.3
100.0	20 ± 3.0
333.0	21 ± 1.2
1000.0	17 ± 2.3 ^p
3333.0	15 ± 1.8 ^p
Trial Summary	Negative
Positive Control ²	
Positive Control ⁵	71 ± 6.7
Positive Control ⁸	

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Date Report Requested: 09/16/2018

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Strain: TA102

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	362 ± 13.0	288 ± 5.5	306 ± 5.3	324 ± 18.5	400 ± 39.2
33.0	335 ± 18.4	292 ± 8.4	295 ± 6.1	275 ± 4.1	377 ± 17.9
100.0	302 ± 8.5	311 ± 7.8	303 ± 15.5	303 ± 9.5	371 ± 10.9
333.0	347 ± 37.8	314 ± 9.6	302 ± 14.5	280 ± 12.2	380 ± 4.4
1000.0	269 ± 21.2 ^P	259 ± 31.5	279 ± 6.5 ^P	302 ± 9.9 ^P	420 ± 16.8 ^P
3333.0	302 ± 8.5 ^P	218 ± 20.3 ^P	290 ± 14.9 ^P	306 ± 12.5 ^P	409 ± 20.9 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁹	1742 ± 61.5				
Positive Control ¹⁰					1590 ± 34.7
Positive Control ¹¹				2081 ± 32.6	
Positive Control ¹²		971 ± 27.2	1055 ± 29.5		

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Strain: TA102

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	289 ± 4.9	270 ± 36.9
33.0	295 ± 23.5	368 ± 20.9
100.0	304 ± 12.2	405 ± 4.7
333.0	310 ± 14.1	414 ± 22.6
1000.0	287 ± 9.9 ^P	403 ± 18.9 ^P
3333.0	253 ± 16.1 ^P	411 ± 20.3 ^P
Trial Summary	Negative	Negative
Positive Control ⁹		
Positive Control ¹⁰		1723 ± 60.9
Positive Control ¹¹	1873 ± 25.2	
Positive Control ¹²		

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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 ¹	249 ± 13.0	251 ± 5.0	304 ± 3.1	284 ± 15.8	359 ± 9.5
33.0	268 ± 3.2	268 ± 2.2	317 ± 2.7	254 ± 19.3	327 ± 11.3
100.0	236 ± 18.7	255 ± 4.0	307 ± 6.1	282 ± 7.5	336 ± 25.1
333.0	249 ± 8.5	295 ± 21.8	314 ± 3.7	297 ± 8.4	276 ± 15.0
1000.0	220 ± 7.7 ^P	248 ± 14.0 ^P	357 ± 26.7 ^P	263 ± 27.4 ^P	375 ± 7.4 ^P
3333.0	221 ± 15.3 ^P	274 ± 28.9 ^P	297 ± 8.5 ^P	309 ± 7.5 ^P	295 ± 25.4 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ¹³			2131 ± 19.9	897 ± 87.2	1736 ± 64.8
Positive Control ¹⁴	756 ± 12.5	796 ± 9.8			

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Strain: TA104

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	326 ± 11.1
33.0	319 ± 5.2
100.0	340 ± 2.4
333.0	364 ± 1.2
1000.0	333 ± 8.6 ^P
3333.0	344 ± 19.9 ^P
Trial Summary	Negative
Positive Control ¹³	1494 ± 45.3
Positive Control ¹⁴	

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LEGEND

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: 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
- 9: 1.0 ug/Plate Mitomycin-C
- 10: 5.0 ug/Plate Sterigmatocystin
- 11: 10.0 ug/Plate Sterigmatocystin
- 12: 75.0 ug/Plate Other Positive Control
- 13: 4.0 ug/Plate 2-Aminoanthracene
- 14: 75.0 ug/Plate Methyl Methane Sulfonate
- p: Precipitate
- x: Slight Toxicity and Precipitate

**** END OF REPORT ****