

Experiment Number: **787406**

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

G06: Ames Summary Data

Test Compound: **3,4-Dihydroxycinnamic acid**

CAS Number: **331-39-5**

Date Report Requested: **09/18/2018**

Time Report Requested: **05:36:09**

NTP Study Number:

787406

Study Result:

Negative

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G06: Ames Summary Data

Test Compound: 3,4-Dihydroxycinnamic acid
CAS Number: 331-39-5

Date Report Requested: 09/18/2018

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	Without S9
Vehicle Control ¹	105 ± 2.8	93 ± 6.5	110 ± 5.5	114 ± 1.2	160 ± 3.7
100.0	103 ± 1.7		108 ± 3.2		
333.0	105 ± 2.2		120 ± 15.0		
1000.0	100 ± 1.8	86 ± 8.2	126 ± 7.2		
3333.0	98 ± 11.0	88 ± 1.8	110 ± 3.6	108 ± 7.2	166 ± 7.3
5000.0		100 ± 3.9		113 ± 1.5	173 ± 4.4
6667.0		105 ± 7.4		137 ± 9.2	175 ± 0.9
7500.0				142 ± 4.4	171 ± 6.0
10000.0	154 ± 9.9	111 ± 1.8	89 ± 89.3 ^x	58 ± 58.3 ^x	175 ± 5.5
Trial Summary	Equivocal	Negative	Equivocal	Negative	Negative
Positive Control ²					
Positive Control ³	486 ± 46.1	279 ± 8.7	579 ± 37.2	683 ± 24.9	887 ± 53.6
Positive Control ⁴					
Positive Control ⁵					
Positive Control ⁶					

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Strain: TA100

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	145 ± 7.8	182 ± 5.0	124 ± 2.8	129 ± 11.9	167 ± 6.7
100.0			120 ± 6.6	130 ± 3.5	
333.0			136 ± 4.3	133 ± 1.2	
1000.0			134 ± 9.1	133 ± 11.5	
3333.0	136 ± 4.7	139 ± 4.7	129 ± 5.8 ^p	156 ± 5.9	168 ± 10.0
5000.0	138 ± 6.5	155 ± 9.1			180 ± 9.8
6667.0	160 ± 19.0	184 ± 5.7			205 ± 10.5
7500.0	166 ± 7.0	175 ± 6.2			195 ± 4.6
10000.0	189 ± 9.5	191 ± 6.4 ^p	144 ± 6.8 ^p	167 ± 15.0 ^p	208 ± 4.0 ^p
Trial Summary	Equivocal	Negative	Negative	Negative	Negative
Positive Control ²					306 ± 12.3
Positive Control ³	351 ± 7.2				
Positive Control ⁴		468 ± 13.9			
Positive Control ⁵					
Positive Control ⁶			1054 ± 120.7	1180 ± 28.7	

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	118 ± 6.9	117 ± 9.6	114 ± 6.7	144 ± 2.2
100.0		113 ± 12.0		
333.0		110 ± 0.9		
1000.0		118 ± 13.0	103 ± 2.7	145 ± 1.3
3333.0	138 ± 6.8	174 ± 1.2 ^p	107 ± 3.5	143 ± 6.3
5000.0	155 ± 5.2		92 ± 2.4	143 ± 7.3
6667.0	151 ± 6.5		115 ± 11.8	167 ± 9.9
7500.0	145 ± 2.7			
10000.0	164 ± 2.3 ^p	186 ± 21.0 ^p	103 ± 12.9	169 ± 4.2 ^p
Trial Summary	Equivocal	Equivocal	Negative	Negative
Positive Control ²	574 ± 27.7			
Positive Control ³				
Positive Control ⁴				
Positive Control ⁵		864 ± 36.3	475 ± 33.6	798 ± 34.6
Positive Control ⁶				

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Test Compound: 3,4-Dihydroxycinnamic acid

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Date Report Requested: 09/18/2018

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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	8 ± 3.8	9 ± 2.1	15 ± 0.3	15 ± 2.0	10 ± 1.5
3333.0	12 ± 2.9	12 ± 1.9	11 ± 1.2	12 ± 2.3	13 ± 0.7
5000.0	15 ± 4.7	9 ± 2.6	12 ± 1.2	11 ± 1.7	15 ± 0.7
6667.0	14 ± 2.6	11 ± 2.3	12 ± 0.3	11 ± 2.3	11 ± 1.8
6700.0					
7500.0	13 ± 1.2	11 ± 2.7	10 ± 1.0	10 ± 2.0	11 ± 1.0
10000.0	16 ± 3.0	11 ± 1.2	13 ± 1.2 ^p	12 ± 1.2 ^p	13 ± 0.9 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					33 ± 2.2
Positive Control ³	338 ± 12.5	196 ± 17.7			
Positive Control ⁵					
Positive Control ⁶			69 ± 6.5	96 ± 0.3	

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Test Compound: 3,4-Dihydroxycinnamic acid
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Date Report Requested: 09/18/2018

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	10 ± 0.6
3333.0	11 ± 2.2
5000.0	12 ± 1.2
6667.0	
6700.0	12 ± 1.2
7500.0	11 ± 1.5
10000.0	Toxic
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	85 ± 8.7
Positive Control ⁶	

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Date Report Requested: 09/18/2018

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Strain: TA1537

Dose (ug/Plate)	Without S9
Vehicle Control ¹	6 ± 0.9
3333.0	9 ± 3.0
5000.0	5 ± 0.0
6667.0	5 ± 0.9
7500.0	7 ± 0.6
10000.0	3 ± 1.0 ^p
Trial Summary	Negative
Positive Control ⁷	19 ± 2.8

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G06: Ames Summary Data

Test Compound: 3,4-Dihydroxycinnamic acid

CAS Number: 331-39-5

Date Report Requested: 09/18/2018

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	145 ± 11.8	153 ± 12.9	86 ± 8.7	214 ± 12.1	140 ± 2.6
3333.0	147 ± 5.5	164 ± 0.3	86 ± 3.3	191 ± 10.6	142 ± 8.0
5000.0	153 ± 7.7	173 ± 3.8	86 ± 5.5	201 ± 9.5	138 ± 3.1
6667.0	137 ± 4.4	193 ± 5.9	104 ± 11.8	199 ± 6.2	154 ± 8.5
7500.0	101 ± 50.3	200 ± 13.1	101 ± 12.0	208 ± 9.3	174 ± 7.9
10000.0	147 ± 2.3	20 ± 14.3	130 ± 6.3 ^p	198 ± 7.5 ^p	182 ± 7.3 ^p
Trial Summary	Negative	Equivocal	Equivocal	Negative	Negative
Positive Control ⁴					
Positive Control ⁶				698 ± 26.9	800 ± 8.7
Positive Control ⁸	358 ± 27.7	393 ± 9.2	431 ± 46.7		

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Test Compound: 3,4-Dihydroxycinnamic acid
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Strain: TA97

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	209 ± 5.9	168 ± 7.9
3333.0	197 ± 11.2	150 ± 4.0
5000.0	208 ± 16.4	143 ± 8.1
6667.0	240 ± 8.7	154 ± 3.0
7500.0	223 ± 18.1	117 ± 34.9
10000.0	225 ± 13.1 ^p	163 ± 10.2 ^p
Trial Summary	Negative	Negative
Positive Control ⁴	669 ± 3.3	
Positive Control ⁶		541 ± 8.5
Positive Control ⁸		

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	15 ± 3.2	22 ± 4.3	20 ± 3.0	24 ± 1.9	33 ± 3.2
33.0					
100.0	18 ± 4.5	19 ± 1.5			30 ± 3.5
333.0	18 ± 2.6	19 ± 4.3			Toxic
1000.0	10 ± 1.0	20 ± 0.9			17 ± 1.7
3333.0	16 ± 2.5	23 ± 2.0	16 ± 1.7	26 ± 2.8	26 ± 6.1 ^p
5000.0			19 ± 1.9	24 ± 2.9	
6667.0			19 ± 0.6	25 ± 3.2	
7500.0			19 ± 0.9	28 ± 1.9	
10000.0	13 ± 5.6 ^s	24 ± 4.4	17 ± 1.3 ^s	27 ± 4.3 ^p	22 ± 2.0 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²				126 ± 12.3	
Positive Control ⁵					350 ± 6.1
Positive Control ⁹	383 ± 0.3	462 ± 6.9	283 ± 10.2		

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Strain: TA98

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	19 ± 1.5	29 ± 1.2	29 ± 2.5	20 ± 0.9	26 ± 3.4
33.0	18 ± 1.7				
100.0	20 ± 1.8	28 ± 4.1		22 ± 1.9	28 ± 0.0
333.0	17 ± 2.1	31 ± 2.4		22 ± 2.1	31 ± 0.7
1000.0	23 ± 4.5	31 ± 3.6		22 ± 2.4	26 ± 4.1
3333.0	22 ± 0.6	27 ± 2.3	26 ± 4.9	28 ± 4.5	27 ± 1.2
5000.0			29 ± 3.2		
6667.0			34 ± 1.9		
7500.0			35 ± 3.8		
10000.0		24 ± 2.5 ^p	33 ± 2.6 ^p	20 ± 3.1 ^s	26 ± 1.8 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			227 ± 13.6		
Positive Control ⁵	363 ± 32.0	433 ± 9.3		825 ± 37.4	659 ± 50.9
Positive Control ⁹					

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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: 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: 4.0 ug/Plate 9-Aminoacridine

8: 24.0 ug/Plate 9-Aminoacridine

9: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

p: Precipitate

s: Slight Toxicity

x: Slight Toxicity and Precipitate

**** END OF REPORT ****