

Experiment Number: 385918

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

**G06: Ames Summary Data**

Test Compound: Cadinene

CAS Number: 29350-73-0

Date Report Requested: 09/14/2018

Time Report Requested: 09:33:14

**NTP Study Number:**

385918

**Study Result:**

Positive

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Mutagenicity

## G06: Ames Summary Data

Test Compound: Cadinene

CAS Number: 29350-73-0

Date Report Requested: 09/14/2018

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## Strain: TA100

Dose (ug/Plate)	Without S9	With 5% Rat S9	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control <sup>1</sup>	114 ± 9.9	117 ± 11.1	108 ± 5.7	102 ± 7.8	132 ± 9.8
1.0	107 ± 4.5				
3.3	100 ± 6.1				
10.0	98 ± 1.9 <sup>s</sup>				
33.0	92 ± 6.1 <sup>s</sup>				
100.0	86 ± 4.2 <sup>s</sup>		113 ± 8.2		
333.0		97 ± 3.8 <sup>s</sup>	117 ± 5.5	107 ± 4.6	145 ± 10.1
1000.0		111 ± 3.7 <sup>s</sup>	112 ± 5.7	111 ± 4.1	125 ± 2.5
3333.0		171 ± 8.2 <sup>s</sup>	135 ± 14.0	147 ± 2.5 <sup>s</sup>	142 ± 10.5 <sup>s</sup>
6667.0		Toxic		150 ± 5.0 <sup>s</sup>	241 ± 8.6 <sup>s</sup>
10000.0		Toxic	148 ± 10.4	Toxic	212 ± 25.1 <sup>s</sup>
Trial Summary	Negative	Equivocal	Equivocal	Equivocal	Equivocal
Positive Control <sup>2</sup>					
Positive Control <sup>3</sup>		3371 ± 67.3	1177 ± 22.9	2994 ± 20.6	
Positive Control <sup>4</sup>					988 ± 49.0
Positive Control <sup>5</sup>	932 ± 27.6				

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Strain: TA100

Dose (ug/Plate)	With 5% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	105 ± 7.4	105 ± 6.4	103 ± 11.5	122 ± 5.2
1.0				
3.3				
10.0				
33.0				
100.0		93 ± 3.3		
333.0	103 ± 3.3	97 ± 4.5	95 ± 6.3	111 ± 15.0 <sup>s</sup>
1000.0	113 ± 7.2	123 ± 0.7	110 ± 3.8	145 ± 10.3 <sup>s</sup>
3333.0	203 ± 4.7 <sup>s</sup>	110 ± 8.7	143 ± 5.9 <sup>s</sup>	123 ± 9.1 <sup>s</sup>
6667.0	Toxic		124 ± 15.5 <sup>s</sup>	199 ± 6.2 <sup>s</sup>
10000.0	Toxic	140 ± 13.2 <sup>s</sup>	Toxic	192 ± 4.1 <sup>s</sup>
Trial Summary	Equivocal	Equivocal	Equivocal	Equivocal
Positive Control <sup>2</sup>	3477 ± 87.5	792 ± 0.6	1550 ± 22.3	
Positive Control <sup>3</sup>				
Positive Control <sup>4</sup>				1301 ± 68.0
Positive Control <sup>5</sup>				

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Strain: TA1535

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	27 ± 3.1	13 ± 0.3	13 ± 1.7
1.0	32 ± 1.5		
3.3	28 ± 2.0 <sup>S</sup>		
10.0	25 ± 0.3 <sup>S</sup>		
33.0	25 ± 0.6 <sup>S</sup>		
100.0	24 ± 3.3 <sup>S</sup>	11 ± 2.2	10 ± 1.5
333.0		11 ± 2.0 <sup>S</sup>	12 ± 1.8
1000.0		10 ± 1.9 <sup>S</sup>	11 ± 0.6
3333.0		16 ± 1.3 <sup>S</sup>	11 ± 3.8
10000.0		19 ± 1.7 <sup>S</sup>	10 ± 0.6 <sup>S</sup>
Trial Summary	Negative	Negative	Negative
Positive Control <sup>2</sup>			82 ± 4.8
Positive Control <sup>3</sup>		123 ± 7.3	
Positive Control <sup>5</sup>	777 ± 31.5		

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Strain: TA1537

Dose (ug/Plate)	With 5% Hamster S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	13 ± 2.2	15 ± 1.2	18 ± 1.2
333.0	12 ± 1.5	10 ± 1.8	25 ± 0.9
1000.0	10 ± 3.8 <sup>s</sup>	12 ± 3.3	16 ± 2.3 <sup>s</sup>
3333.0	Toxic	8 ± 1.8 <sup>s</sup>	8 ± 1.5 <sup>s</sup>
6667.0	Toxic	Toxic	10 ± 3.5 <sup>s</sup>
10000.0	Toxic	Toxic	Toxic
Trial Summary	Negative	Negative	Negative
Positive Control <sup>2</sup>	131 ± 4.1	63 ± 1.7	
Positive Control <sup>4</sup>			75 ± 1.9

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## Strain: TA97

Dose (ug/Plate)	Without S9	With 5% Rat S9	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control <sup>1</sup>	118 ± 9.2	157 ± 7.9	151 ± 10.5	146 ± 6.7	156 ± 7.2
1.0	121 ± 1.2				
3.3	112 ± 9.0				
10.0	120 ± 14.1				
33.0	110 ± 12.9				
100.0	116 ± 4.0 <sup>s</sup>		149 ± 6.2		
333.0		121 ± 5.3	144 ± 11.2	124 ± 11.1 <sup>s</sup>	150 ± 4.1
1000.0		127 ± 9.5	140 ± 3.5	130 ± 11.5 <sup>s</sup>	129 ± 5.6 <sup>s</sup>
3333.0		254 ± 15.9 <sup>s</sup>	162 ± 1.5	238 ± 10.6 <sup>s</sup>	180 ± 13.2 <sup>s</sup>
6667.0		129 ± 24.2 <sup>s</sup>		315 ± 5.4 <sup>s</sup>	285 ± 19.0 <sup>s</sup>
10000.0		Toxic	249 ± 9.0	Toxic	345 ± 35.9 <sup>s</sup>
Trial Summary	Negative	Equivocal	Equivocal	Positive	Positive
Positive Control <sup>2</sup>					
Positive Control <sup>3</sup>		2117 ± 51.7	376 ± 11.3	2057 ± 16.5	
Positive Control <sup>4</sup>					743 ± 11.0
Positive Control <sup>6</sup>	738 ± 19.1				

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CAS Number: 29350-73-0

## Strain: TA97

Dose (ug/Plate)	With 5% Hamster S9	With 5% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	127 ± 12.0	178 ± 8.1	138 ± 5.9	151 ± 6.9	191 ± 10.4
1.0					
3.3					
10.0					
33.0					
100.0			142 ± 7.2		
333.0	115 ± 4.1 <sup>s</sup>	184 ± 13.9	139 ± 5.8	143 ± 2.3 <sup>s</sup>	173 ± 1.5
1000.0	162 ± 14.5 <sup>s</sup>	224 ± 8.2 <sup>s</sup>	166 ± 7.2	154 ± 12.7 <sup>s</sup>	223 ± 10.9 <sup>s</sup>
3333.0	324 ± 23.7 <sup>s</sup>	Toxic	184 ± 6.7	280 ± 10.8 <sup>s</sup>	367 ± 5.8 <sup>s</sup>
6667.0	Toxic	Toxic		195 ± 15.7 <sup>s</sup>	Toxic
10000.0	Toxic	Toxic	264 ± 10.8 <sup>s</sup>	Toxic	Toxic
Trial Summary	Positive	Negative	Weakly Positive	Weakly Positive	Weakly Positive
Positive Control <sup>2</sup>	2178 ± 33.6	1090 ± 19.7	360 ± 3.3	1167 ± 13.0	769 ± 4.9
Positive Control <sup>3</sup>					
Positive Control <sup>4</sup>					
Positive Control <sup>6</sup>					

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	160 ± 6.0	221 ± 9.4
1.0		
3.3		
10.0		
33.0		
100.0		
333.0	175 ± 5.7 <sup>s</sup>	207 ± 8.6
1000.0	134 ± 12.5 <sup>s</sup>	243 ± 8.8
3333.0	156 ± 17.4 <sup>s</sup>	206 ± 21.1 <sup>s</sup>
6667.0	327 ± 22.2 <sup>s</sup>	461 ± 21.7 <sup>s</sup>
10000.0	303 ± 16.6 <sup>s</sup>	495 ± 29.4 <sup>s</sup>
Trial Summary	Weakly Positive	Weakly Positive
Positive Control <sup>2</sup>		
Positive Control <sup>3</sup>		
Positive Control <sup>4</sup>	1111 ± 27.0	763 ± 68.9
Positive Control <sup>6</sup>		



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Strain: TA98

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	15 ± 2.3	30 ± 1.2	31 ± 3.4
1.0	21 ± 1.9		
3.3	14 ± 0.9		
10.0	15 ± 0.0		
33.0	18 ± 1.2		
100.0	14 ± 1.7	31 ± 6.4	33 ± 2.9
333.0		34 ± 3.2	35 ± 0.0
1000.0		38 ± 3.2	37 ± 2.0
3333.0		27 ± 2.9	38 ± 4.1
10000.0		36 ± 2.2	35 ± 0.7 <sup>s</sup>
Trial Summary	Negative	Negative	Negative
Positive Control <sup>2</sup>			570 ± 8.4
Positive Control <sup>3</sup>		892 ± 17.7	
Positive Control <sup>7</sup>	1341 ± 33.3		

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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: Acetone

2: 0.75 ug/Plate 2-Aminoanthracene

3: 1.5 ug/Plate 2-Aminoanthracene

4: 2.0 ug/Plate 2-Aminoanthracene

5: 2.5 ug/Plate Sodium Azide

6: 4.0 ug/Plate 9-Aminoacridine

7: 12.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

\*\* END OF REPORT \*\*