

Experiment Number: **029960**

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

G06: Ames Summary Data

Test Compound: **n-Heptanal**

CAS Number: **111-71-7**

Date Report Requested: **09/14/2018**

Time Report Requested: **14:05:32**

NTP Study Number:

029960

Study Result:

Negative

Experiment Number: 029960

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G06: Ames Summary Data

Test Compound: n-Heptanal

CAS Number: 111-71-7

Date Report Requested: 09/14/2018

Time Report Requested: 14:05:32

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	116 ± 14.4	128 ± 15.1	99 ± 6.2	132 ± 10.8	157 ± 6.9
1.0			111 ± 3.8		
3.0		120 ± 10.4	108 ± 4.8		
10.0	128 ± 9.0	118 ± 3.1	97 ± 3.5		
33.0	133 ± 10.4	132 ± 11.6	112 ± 5.9	137 ± 18.7	170 ± 2.0
100.0	114 ± 7.5	112 ± 6.1	114 ± 6.7	135 ± 12.0	164 ± 0.3
166.0		82 ± 7.5 ^s			
333.0	0 ± 0.0 ^s			130 ± 8.7	138 ± 6.9
666.0	Toxic				
1000.0				125 ± 0.0	175 ± 10.8
1666.0				Toxic	
3333.0					84 ± 10.2 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³	315 ± 8.8	369 ± 7.7	513 ± 16.6		
Positive Control ⁴				487 ± 12.5	
Positive Control ⁵					579 ± 27.4

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Date Report Requested: 09/14/2018
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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	121 ± 4.7	142 ± 3.5
1.0		
3.0		
10.0		
33.0	147 ± 2.6	172 ± 7.2
100.0	138 ± 11.8	158 ± 4.9
166.0		
333.0	104 ± 8.3	132 ± 13.3
666.0		
1000.0	114 ± 4.2	143 ± 15.6
1666.0	0 ± 0.0 ^s	
3333.0		82 ± 3.0 ^s
Trial Summary	Negative	Negative
Positive Control ²	824 ± 6.1	
Positive Control ³		
Positive Control ⁴		721 ± 23.2
Positive Control 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 ¹	23 ± 0.7	24 ± 2.2	13 ± 2.0	13 ± 3.1	12 ± 2.8
1.0		27 ± 0.9			
3.0	21 ± 1.8	27 ± 0.9			
10.0	22 ± 1.3	26 ± 2.6			
33.0	18 ± 1.2	23 ± 1.7	11 ± 3.0	14 ± 1.2	8 ± 0.0
100.0	20 ± 2.7	30 ± 0.3	15 ± 0.6	15 ± 0.7	9 ± 1.5
166.0	0 ± 0.3 ^s				
333.0			15 ± 0.6	14 ± 1.0	12 ± 1.2
1000.0			11 ± 1.9	9 ± 1.5	11 ± 3.2
1666.0			Toxic		Toxic
3333.0				0 ± 0.0 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					389 ± 16.7
Positive Control ³	192 ± 4.0	376 ± 20.9			
Positive Control ⁵			171 ± 4.0		
Positive Control ⁶				90 ± 4.8	

Experiment Number: 029960
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Test Compound: n-Heptanal
CAS Number: 111-71-7

Date Report Requested: 09/14/2018
Time Report Requested: 14:05:32

Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	12 ± 1.2
1.0	
3.0	
10.0	
33.0	11 ± 0.9
100.0	10 ± 1.2
166.0	
333.0	10 ± 3.0
1000.0	7 ± 0.7
1666.0	
3333.0	4 ± 2.1 ^s
Trial Summary	Negative
Positive Control ⁴	
Positive Control ³	
Positive Control ⁵	311 ± 20.8
Positive Control ⁶	

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Test Compound: n-Heptanal
CAS Number: 111-71-7

Date Report Requested: 09/14/2018
Time Report Requested: 14:05:32

Strain: TA1537

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	10 ± 1.8	12 ± 1.5	11 ± 0.9
3.0	9 ± 2.7		
10.0	7 ± 0.3		
33.0	9 ± 0.9	9 ± 0.9	11 ± 2.9
100.0	13 ± 1.5	7 ± 0.7	11 ± 3.2
166.0	2 ± 1.2 ^s		
333.0		9 ± 1.7	10 ± 1.5
1000.0		9 ± 1.5	7 ± 0.3
3333.0		0 ± 0.0 ^s	1 ± 0.7 ^s
Trial Summary	Negative	Negative	Negative
Positive Control ⁴			61 ± 6.2
Positive Control ⁵		46 ± 3.8	
Positive Control ⁷	387 ± 41.7		

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Date Report Requested: 09/14/2018
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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	168 ± 5.0	120 ± 4.2	167 ± 15.8	198 ± 3.5	147 ± 3.2
1.0		146 ± 2.6			
3.0	161 ± 2.8	145 ± 9.8			
10.0	177 ± 3.0	153 ± 3.5			
33.0	179 ± 4.9	140 ± 4.9	198 ± 1.7	220 ± 0.6	159 ± 9.3
100.0	161 ± 6.0	136 ± 1.2	182 ± 6.1	205 ± 4.4	170 ± 4.4
166.0	160 ± 11.1				
333.0			159 ± 2.6	201 ± 2.5	169 ± 4.2
1000.0			163 ± 2.1	191 ± 17.2	157 ± 7.1
1666.0			0 ± 0.0 ^s		69 ± 34.3 ^s
3333.0				Toxic	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					417 ± 7.5
Positive Control ⁴			303 ± 16.0		
Positive Control ⁵				345 ± 12.4	
Positive Control ⁷	534 ± 36.7	591 ± 22.8			

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Test Compound: n-Heptanal
CAS Number: 111-71-7

Date Report Requested: 09/14/2018
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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	178 ± 24.0
1.0	
3.0	
10.0	
33.0	208 ± 5.9
100.0	196 ± 1.5
166.0	
333.0	172 ± 11.5
1000.0	136 ± 30.4
1666.0	
3333.0	47 ± 32.5 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ⁴	402 ± 11.4
Positive Control ⁵	
Positive Control ⁷	

Experiment Number: 029960

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Mutagenicity

G06: Ames Summary Data

Test Compound: n-Heptanal

CAS Number: 111-71-7

Date Report Requested: 09/14/2018

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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	14 ± 2.3	16 ± 0.6	16 ± 0.9	29 ± 3.2	38 ± 4.1
1.0			19 ± 0.9		
3.0		15 ± 0.6	17 ± 1.5		
10.0	19 ± 1.3	17 ± 1.2	16 ± 0.9		
33.0	21 ± 3.3	16 ± 0.6	13 ± 1.7	27 ± 2.9	33 ± 2.1
100.0	16 ± 1.9	17 ± 2.7	14 ± 0.9	28 ± 3.9	35 ± 2.7
166.0		11 ± 3.0			
333.0	Toxic			25 ± 2.2	30 ± 0.6
666.0	Toxic				
1000.0				22 ± 3.3	27 ± 1.9
1666.0				0 ± 0.0 ^s	
3333.0					8 ± 4.0 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ⁴				185 ± 6.7	99 ± 8.1
Positive Control ⁸	487 ± 35.5	702 ± 16.9	609 ± 24.0		

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	38 ± 1.5	33 ± 1.5
1.0		
3.0		
10.0		
33.0	27 ± 2.9	27 ± 1.8
100.0	26 ± 3.1	26 ± 0.9
166.0		
333.0	32 ± 2.5	26 ± 0.6
666.0		
1000.0	32 ± 4.8	24 ± 8.5
1666.0	17 ± 7.5	
3333.0		18 ± 3.8 ^s
Trial Summary	Negative	Negative
Positive Control ²	463 ± 9.5	
Positive Control ⁴		244 ± 21.2
Positive Control ⁸		

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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: 0.5 ug/Plate 2-Aminoanthracene
- 3: 1.0 ug/Plate Sodium Azide
- 4: 1.0 ug/Plate 2-Aminoanthracene
- 5: 2.5 ug/Plate 2-Aminoanthracene
- 6: 5.0 ug/Plate 2-Aminoanthracene
- 7: 50.0 ug/Plate 9-Aminoacridine
- 8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
- s: Slight Toxicity

** END OF REPORT **