

Experiment Number: A93805

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Ethylene

CAS Number: 74-85-1

Date Report Requested: 09/15/2018

Time Report Requested: 12:48:35

NTP Study Number:

A93805

Study Result:

Negative

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Test Compound: Ethylene

CAS Number: 74-85-1

Date Report Requested: 09/15/2018

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Strain: TA100

Dose (mL/Chamber)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	110 ± 4.9	106 ± 10.2	115 ± 5.8	129 ± 10.5	109 ± 11.0
0.6	128 ± 9.5	97 ± 9.3	111 ± 9.9	141 ± 3.8	117 ± 5.5
1.2	115 ± 8.6	110 ± 2.4	114 ± 5.0	151 ± 6.1	116 ± 7.3
2.3	87 ± 6.6	115 ± 0.9	107 ± 9.9	134 ± 10.2	107 ± 4.9
3.5	97 ± 5.3	105 ± 9.2	113 ± 7.1	129 ± 4.0	116 ± 3.8
4.7	104 ± 3.2	108 ± 9.5	109 ± 12.7	127 ± 5.2	102 ± 3.1
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					1821 ± 13.4
Positive Control ³			1254 ± 32.1		
Positive Control ⁴				770 ± 19.4	
Positive Control ⁵	968 ± 8.6	1223 ± 17.9			

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Strain: TA100

Dose (mL/Chamber)	With 30% Hamster S9
Vehicle Control ¹	112 ± 5.0
0.6	123 ± 6.4
1.2	106 ± 5.0
2.3	125 ± 6.9
3.5	126 ± 9.8
4.7	128 ± 2.2
Trial Summary	Negative
Positive Control ²	
Positive Control ³	768 ± 83.3
Positive Control ⁴	
Positive Control ⁵	

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

Time Report Requested: 12:48:35

CAS Number: 74-85-1

Strain: TA1535

Dose (mL/Chamber)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	11 ± 3.4	13 ± 3.0	8 ± 2.0	17 ± 3.3	40 ± 29.7
0.6	17 ± 1.7	7 ± 1.5	8 ± 3.8	17 ± 0.9	4 ± 0.3
1.2	17 ± 1.2	6 ± 1.0	6 ± 1.5	15 ± 2.1	11 ± 2.7
2.3	13 ± 2.3	10 ± 1.2	9 ± 3.2	16 ± 1.0	8 ± 0.6
3.5	12 ± 3.2	12 ± 2.6	9 ± 1.8	16 ± 2.0	7 ± 0.7
4.7	14 ± 3.1	10 ± 2.4	10 ± 1.5	12 ± 2.5	9 ± 3.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					211 ± 6.4
Positive Control ⁵	1221 ± 14.8	1185 ± 13.7			
Positive Control ⁴			157 ± 15.5		
Positive Control ⁶				108 ± 1.0	

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Test Compound: Ethylene
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Date Report Requested: 09/15/2018
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Strain: TA1535

Dose (mL/Chamber)	With 30% Hamster S9
Vehicle Control ¹	13 ± 0.3
0.6	13 ± 2.6
1.2	16 ± 3.7
2.3	21 ± 1.7
3.5	16 ± 0.7
4.7	17 ± 1.2
Trial Summary	Negative
Positive Control ³	
Positive Control ⁵	
Positive Control ⁴	239 ± 14.3
Positive Control ⁶	

Experiment Number: A93805

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Test Compound: Ethylene

CAS Number: 74-85-1

Date Report Requested: 09/15/2018

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Strain: TA97

Dose (mL/Chamber)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	115 ± 0.6	123 ± 3.7	128 ± 6.7	124 ± 5.0	123 ± 5.7
0.6	108 ± 12.4	129 ± 8.0	128 ± 3.0	112 ± 3.7	
1.2	108 ± 1.0	133 ± 7.0	136 ± 4.7	101 ± 9.5	
2.0					
2.3	106 ± 8.5	130 ± 1.5	119 ± 6.9	96 ± 6.1	
2.5					135 ± 2.0
3.5	116 ± 6.7	129 ± 12.1	120 ± 6.2	122 ± 8.4	
4.7	107 ± 2.5	118 ± 5.5	125 ± 5.0	99 ± 10.3	
5.0					125 ± 3.7
10.0					140 ± 7.3
15.0					111 ± 2.2
20.0					134 ± 4.8
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					935 ± 40.3
Positive Control ³			565 ± 40.0		
Positive Control ⁴				534 ± 12.3	
Positive Control ⁷	546 ± 5.9	484 ± 27.1			

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Strain: TA97

Dose (mL/Chamber)	With 30% Hamster S9
Vehicle Control ¹	89 ± 6.0
0.6	118 ± 0.3
1.2	105 ± 11.6
2.0	111 ± 2.0
2.3	
2.5	
3.5	120 ± 5.2
4.7	97 ± 3.8
5.0	
10.0	
15.0	
20.0	
Trial Summary	Negative
Positive Control ²	
Positive Control ³	732 ± 45.0
Positive Control ⁴	
Positive Control ⁷	

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Strain: TA98

Dose (mL/Chamber)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	26 ± 2.3	20 ± 0.0	19 ± 1.2	24 ± 1.5	28 ± 4.7
0.6	27 ± 3.1	18 ± 3.8	21 ± 3.4	26 ± 1.0	27 ± 0.3
1.2	28 ± 2.0	11 ± 1.0	16 ± 4.0	24 ± 3.8	22 ± 4.6
2.3	30 ± 4.0	16 ± 1.2	20 ± 0.3	27 ± 2.0	20 ± 6.8
3.5	23 ± 1.5	17 ± 1.3	17 ± 0.6	19 ± 2.0	19 ± 3.5
4.7	23 ± 1.5	15 ± 1.7	20 ± 3.0	25 ± 2.6	21 ± 2.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					964 ± 11.6
Positive Control ³			938 ± 59.9		
Positive Control ⁸	822 ± 30.3	789 ± 27.7			
Positive Control ⁴				678 ± 32.7	

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Strain: TA98

Dose (mL/Chamber)	With 30% Hamster S9
Vehicle Control ¹	23 ± 2.0
0.6	27 ± 1.2
1.2	20 ± 5.0
2.3	21 ± 5.4
3.5	25 ± 1.7
4.7	18 ± 1.3
Trial Summary	Negative
Positive Control ²	
Positive Control ³	767 ± 7.2
Positive Control ⁸	
Positive Control ⁴	

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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: Solvent
- 2: 1.0 mL/Chamber 2-Aminoanthracene
- 3: 2.0 mL/Chamber 2-Aminoanthracene
- 4: 5.0 mL/Chamber 2-Aminoanthracene
- 5: 5.0 mL/Chamber Sodium Azide
- 6: 10.0 mL/Chamber 2-Aminoanthracene
- 7: 50.0 mL/Chamber 9-Aminoacridine
- 8: 2.5 mL/Chamber 4-Nitro-O-Phenylenediamine

** END OF REPORT **