

Experiment Number: **A46915**

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

G06: Ames Summary Data

Test Compound: **Nicotine (compounds related to)**

CAS Number: **54-11-5**

Date Report Requested: **09/17/2018**

Time Report Requested: **03:17:59**

NTP Study Number:

A46915

Study Result:

Negative

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CAS Number: 54-11-5

Date Report Requested: 09/17/2018

Time Report Requested: 03:17:59

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 5% Rat S9	With 5% Rat S9	With 10% Rat S9
Vehicle Control ¹	118 ± 6.4	132 ± 9.8	109 ± 1.8	127 ± 1.2	109 ± 9.2
100.0	124 ± 2.6	137 ± 6.4			132 ± 6.4
333.0	123 ± 3.2	130 ± 2.6			123 ± 10.4
1000.0	120 ± 3.1	137 ± 23.3	104 ± 0.6	131 ± 2.9	146 ± 4.8
1666.0			99 ± 5.6	138 ± 3.9	
3333.0	115 ± 5.9	149 ± 13.9	115 ± 5.5	152 ± 3.5	151 ± 13.0
6666.0		119 ± 2.8	139 ± 4.9	167 ± 4.9	
10000.0	Toxic		132 ± 3.5	158 ± 5.4	162 ± 22.6
Trial Summary	Negative	Negative	Negative	Equivocal	Equivocal
Positive Control ²					
Positive Control ³			663 ± 14.7	570 ± 18.9	585 ± 29.3
Positive Control ⁴	911 ± 7.2	880 ± 13.0			
Positive Control ⁵					

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Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9	With 5% Hamster S9	With 5% Hamster S9
Vehicle Control ¹	120 ± 6.8	148 ± 1.5	139 ± 1.7	111 ± 5.7	145 ± 6.4
100.0			146 ± 1.9		
333.0			138 ± 0.3		
1000.0	122 ± 1.8	152 ± 0.7	146 ± 5.5	116 ± 7.6	163 ± 11.9
1666.0	127 ± 1.0	167 ± 5.9		114 ± 11.6	198 ± 7.6
3333.0	132 ± 2.0	175 ± 12.4	132 ± 7.4	130 ± 3.0	198 ± 8.8
6666.0	149 ± 1.0	162 ± 1.5		151 ± 12.8	201 ± 6.6
10000.0	148 ± 12.7	134 ± 5.6	151 ± 10.4	90 ± 2.8	176 ± 5.8
Trial Summary	Negative	Negative	Negative	Equivocal	Equivocal
Positive Control ²				714 ± 14.9	637 ± 19.6
Positive Control ³	635 ± 15.9	588 ± 10.6			
Positive Control ⁴					
Positive Control ⁵			668 ± 15.9		

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	122 ± 9.9	128 ± 14.2	151 ± 1.7	128 ± 0.6	138 ± 5.5
100.0	132 ± 7.9			138 ± 5.1	130 ± 2.0
333.0	94 ± 7.2			134 ± 3.5	131 ± 4.0
1000.0	125 ± 1.5	131 ± 9.0	155 ± 2.1	128 ± 1.5	136 ± 5.0
1666.0		141 ± 9.9	158 ± 14.3		
3333.0	139 ± 5.4	149 ± 9.6	171 ± 2.6	135 ± 8.2	129 ± 6.7
6666.0		167 ± 8.0	187 ± 3.2		
10000.0	130 ± 5.2	188 ± 6.4	151 ± 7.2	121 ± 3.3	120 ± 10.7
Trial Summary	Negative	Equivocal	Negative	Negative	Negative
Positive Control ²	594 ± 15.4	727 ± 19.1	664 ± 16.5		
Positive Control ³				745 ± 26.8	654 ± 9.7
Positive Control ⁴					
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	10 ± 1.2	12 ± 2.0	12 ± 2.3	11 ± 1.7	13 ± 1.9
100.0	11 ± 0.6	12 ± 0.7	13 ± 1.5	10 ± 0.7	15 ± 1.8
333.0	9 ± 1.7	11 ± 2.3	13 ± 0.6	8 ± 0.7	13 ± 0.9
1000.0	7 ± 0.9	13 ± 1.5	11 ± 0.6	10 ± 0.0	15 ± 1.7
3333.0	8 ± 0.6	8 ± 1.0	11 ± 1.8	11 ± 2.1	12 ± 2.5
6666.0		9 ± 0.6			
10000.0	Toxic		12 ± 1.2	9 ± 0.3	14 ± 2.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					132 ± 9.9
Positive Control ⁴	851 ± 24.8	954 ± 11.1			
Positive Control ⁵			120 ± 5.8		
Positive Control ⁶				110 ± 6.7	

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Date Report Requested: 09/17/2018

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	11 ± 0.9
100.0	10 ± 1.0
333.0	7 ± 0.7
1000.0	9 ± 2.1
3333.0	10 ± 3.1
6666.0	
10000.0	9 ± 1.5
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	115 ± 7.0
Positive Control ⁶	

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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	147 ± 5.5	138 ± 5.5	155 ± 3.3	165 ± 15.7	173 ± 7.6
100.0	153 ± 3.5	134 ± 6.8	163 ± 5.3	158 ± 18.6	174 ± 0.6
333.0	158 ± 10.0	147 ± 5.5	150 ± 3.0	164 ± 8.3	141 ± 8.9
1000.0	152 ± 9.3	134 ± 4.0	162 ± 14.2	174 ± 8.2	160 ± 13.6
3333.0	135 ± 5.2	151 ± 8.0	169 ± 8.8	159 ± 8.3	164 ± 1.7
6666.0		135 ± 7.5			
10000.0	Toxic		147 ± 10.9	148 ± 9.7	165 ± 14.3
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					630 ± 22.3
Positive Control ³			557 ± 24.6		
Positive Control ⁵				647 ± 24.0	
Positive Control ⁷	611 ± 25.1	487 ± 15.0			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	174 ± 14.2
100.0	182 ± 3.1
333.0	147 ± 6.6
1000.0	148 ± 5.8
3333.0	166 ± 15.5
6666.0	
10000.0	159 ± 19.5
Trial Summary	Negative
Positive Control ²	
Positive Control ³	708 ± 9.1
Positive Control ⁵	
Positive Control ⁷	

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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	21 ± 2.0	17 ± 1.9	23 ± 3.7	25 ± 4.6	31 ± 3.8
100.0	18 ± 3.5	22 ± 2.8	19 ± 3.2	26 ± 4.5	26 ± 2.3
333.0	18 ± 2.7	21 ± 4.0	26 ± 1.8	31 ± 4.0	25 ± 0.7
1000.0	24 ± 1.3	19 ± 4.9	27 ± 2.3	30 ± 3.1	22 ± 2.2
3333.0	19 ± 2.9	22 ± 4.1	21 ± 3.8	29 ± 2.6	23 ± 1.5
6666.0		12 ± 1.5			
10000.0	0 ± 0.0 ^x		21 ± 0.3	20 ± 1.3	27 ± 2.6
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					527 ± 15.3
Positive Control ³			476 ± 11.9		
Positive Control ⁸	596 ± 25.9	427 ± 16.1			
Positive Control ⁵				555 ± 16.7	

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	30 ± 5.9
100.0	30 ± 1.0
333.0	29 ± 2.4
1000.0	25 ± 4.1
3333.0	25 ± 1.8
6666.0	
10000.0	22 ± 3.3
Trial Summary	Negative
Positive Control ²	
Positive Control ³	635 ± 11.4
Positive Control ⁸	
Positive Control ⁵	

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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: 1.0 ug/Plate 2-Aminoanthracene

3: 2.0 ug/Plate 2-Aminoanthracene

4: 5.0 ug/Plate Sodium Azide

5: 5.0 ug/Plate 2-Aminoanthracene

6: 10.0 ug/Plate 2-Aminoanthracene

7: 50.0 ug/Plate 9-Aminoacridine

8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

x: Slight Toxicity and Precipitate

**** END OF REPORT ****