

Experiment Number: 277638

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: DL-ethionine

CAS Number: 67-21-0

Date Report Requested: 09/11/2018

Time Report Requested: 14:28:07

NTP Study Number:

277638

Study Result:

Negative

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Test Compound: DL-ethionine

CAS Number: 67-21-0

Date Report Requested: 09/11/2018

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	104 ± 7.4	100 ± 4.7	110 ± 13.6	144 ± 4.8	124 ± 10.8
0.1		103 ± 7.7			
0.3		93 ± 3.2	99 ± 7.8		
1.0	92 ± 4.0	91 ± 7.7	112 ± 1.7	136 ± 5.0	
3.0	89 ± 7.1	96 ± 8.6	118 ± 3.5	117 ± 15.9	113 ± 15.5
10.0	87 ± 4.9	98 ± 8.8	84 ± 2.3	113 ± 12.7	123 ± 4.4
33.0	36 ± 9.3	98 ± 7.1	77 ± 6.0	126 ± 0.6	107 ± 3.5
66.0				103 ± 7.3	
100.0	3 ± 0.3	39 ± 6.1			22 ± 5.0
333.0					13 ± 3.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³				423 ± 4.3	
Positive Control ⁴					477 ± 57.3
Positive Control ⁵	895 ± 59.7	1335 ± 96.2	422 ± 8.8		

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Strain: TA100

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	149 ± 6.2	129 ± 4.1	121 ± 8.2	109 ± 0.3
0.1				
0.3	152 ± 16.2			104 ± 10.5
1.0	159 ± 7.3	127 ± 1.2		118 ± 8.2
3.0	151 ± 2.6	122 ± 5.5	118 ± 3.6	113 ± 11.1
10.0	144 ± 4.7	107 ± 11.3	108 ± 1.3	115 ± 3.9
33.0	159 ± 9.6	98 ± 5.8	86 ± 7.3	114 ± 6.1
66.0		93 ± 5.8		
100.0	93 ± 5.3		27 ± 6.7	96 ± 4.7
333.0	51 ± 2.0		14 ± 2.6	64 ± 0.7
Trial Summary	Negative	Negative	Negative	Negative
Positive Control ²		792 ± 64.5		
Positive Control ³			594 ± 72.1	541 ± 17.1
Positive Control ⁴	329 ± 14.3			
Positive Control ⁵				

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control ¹	10 ± 4.0	9 ± 0.9	10 ± 1.7	9 ± 1.0	16 ± 2.6
0.1		8 ± 2.1			
0.3	15 ± 1.2	7 ± 1.2	5 ± 0.3		
1.0	17 ± 0.6	8 ± 0.9	7 ± 2.4	11 ± 1.5	12 ± 0.9
3.0	22 ± 2.8	7 ± 1.7	10 ± 0.3	8 ± 1.8	11 ± 1.2
10.0	18 ± 0.9	8 ± 1.7	8 ± 1.5	9 ± 0.7	11 ± 1.2
33.0	20 ± 0.7		10 ± 0.3	9 ± 0.3	13 ± 1.3
66.0				11 ± 2.0	
100.0					13 ± 1.2
Trial Summary	Equivocal	Negative	Negative	Negative	Negative
Positive Control ³					
Positive Control ⁴				53 ± 2.1	
Positive Control ⁵	826 ± 29.9	1186 ± 56.2	354 ± 21.6		
Positive Control ⁶					51 ± 5.6

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Test Compound: DL-ethionine

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Date Report Requested: 09/11/2018

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	9 ± 2.6	13 ± 1.8
0.1		
0.3		
1.0	7 ± 0.3	12 ± 1.5
3.0	8 ± 1.2	9 ± 1.2
10.0	9 ± 0.9	7 ± 1.5
33.0	9 ± 3.5	11 ± 1.2
66.0	9 ± 0.3	
100.0		8 ± 1.3
Trial Summary	Negative	Negative
Positive Control ³	70 ± 7.0	
Positive Control ⁴		279 ± 10.5
Positive Control ⁵		
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	148 ± 2.8	163 ± 7.8	201 ± 9.2	190 ± 8.7	152 ± 7.6
0.3	142 ± 5.5	167 ± 1.5			
1.0	161 ± 11.3	156 ± 4.0	183 ± 8.6	159 ± 19.5	154 ± 7.0
3.0	158 ± 7.6	165 ± 4.2	172 ± 17.0	166 ± 4.7	148 ± 2.7
10.0	137 ± 6.7	147 ± 6.0	173 ± 4.7	172 ± 6.2	142 ± 0.7
33.0	128 ± 7.1	122 ± 11.9	133 ± 4.9	174 ± 7.5	126 ± 12.7
66.0			120 ± 12.3		100 ± 0.7
100.0				146 ± 14.4	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					373 ± 13.2
Positive Control ³			351 ± 18.6		
Positive Control ⁴				302 ± 4.9	
Positive Control ⁷	350 ± 12.8	465 ± 14.4			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	148 ± 5.8
0.3	
1.0	142 ± 7.1
3.0	148 ± 13.3
10.0	140 ± 8.1
33.0	134 ± 11.3
66.0	
100.0	76 ± 2.0 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	383 ± 11.5
Positive Control ⁴	
Positive Control ⁷	

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Test Compound: DL-ethionine

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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	12 ± 1.9	21 ± 4.9	22 ± 2.5	30 ± 5.2	28 ± 2.2
0.1		24 ± 2.3			
0.3		19 ± 4.0	20 ± 0.6		
1.0	19 ± 0.9	18 ± 1.3	16 ± 2.0	28 ± 3.4	
3.0	12 ± 2.8	19 ± 1.9	16 ± 2.2	22 ± 2.7	27 ± 0.9
10.0	10 ± 1.2	14 ± 2.3	12 ± 1.2	21 ± 1.8	28 ± 2.7
33.0	11 ± 1.9	10 ± 1.5	11 ± 1.8	17 ± 0.9	21 ± 2.9
66.0				23 ± 2.7	
100.0	9 ± 1.3	7 ± 0.3			10 ± 1.2
333.0					6 ± 0.3
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³				371 ± 31.8	109 ± 9.5
Positive Control ⁸	475 ± 21.8	719 ± 31.7	578 ± 37.7		

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Test Compound: DL-ethionine

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Strain: TA98

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	27 ± 2.0	18 ± 1.2	20 ± 2.3	25 ± 4.0
0.1				
0.3	20 ± 2.9			25 ± 3.2
1.0	17 ± 0.3	18 ± 1.9		27 ± 3.5
3.0	15 ± 2.9	19 ± 3.5	21 ± 4.9	25 ± 5.5
10.0	16 ± 2.7	18 ± 1.9	19 ± 0.7	28 ± 1.0
33.0	19 ± 2.3	11 ± 0.6	15 ± 1.2	30 ± 1.2
66.0		16 ± 2.7		
100.0	14 ± 2.4		8 ± 1.5	9 ± 2.0
333.0	7 ± 1.9		11 ± 1.5	2 ± 0.0
Trial Summary	Negative	Negative	Negative	Negative
Positive Control ²		884 ± 24.5		
Positive Control ³	135 ± 2.7		493 ± 38.1	525 ± 31.7
Positive Control ⁸				

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Strain: TA104

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	305 ± 14.2	305 ± 4.6	370 ± 12.9	403 ± 21.2	369 ± 8.1
0.3	316 ± 7.0	319 ± 11.3			
1.0	319 ± 10.3	307 ± 3.8	380 ± 10.9	387 ± 2.2	400 ± 15.2
3.0	311 ± 6.5	281 ± 14.1	391 ± 11.6	363 ± 10.5	410 ± 11.5
10.0	309 ± 1.5	226 ± 6.2	349 ± 5.2	383 ± 26.9	341 ± 22.8
33.0	250 ± 27.6	163 ± 10.5	231 ± 3.5	417 ± 6.2	251 ± 4.3
66.0			196 ± 1.0		201 ± 19.2
100.0				261 ± 14.2	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					1071 ± 23.3
Positive Control ⁶			935 ± 5.8	789 ± 27.1	
Positive Control ⁹	953 ± 26.9	610 ± 57.7			

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Strain: TA104

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	338 ± 3.6
0.3	
1.0	334 ± 11.7
3.0	360 ± 13.9
10.0	340 ± 13.3
33.0	355 ± 16.6
66.0	
100.0	245 ± 28.2
Trial Summary	Negative
Positive Control ⁴	944 ± 37.9
Positive Control ⁶	
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: 0.5 ug/Plate 2-Aminoanthracene
- 3: 1.0 ug/Plate 2-Aminoanthracene
- 4: 2.5 ug/Plate 2-Aminoanthracene
- 5: 5.0 ug/Plate Sodium Azide
- 6: 5.0 ug/Plate 2-Aminoanthracene
- 7: 50.0 ug/Plate 9-Aminoacridine
- 8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
- 9: 250.0 ug/Plate Solvent
- s: Slight Toxicity

**** END OF REPORT ****