

Experiment Number: A32205

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

G06: Ames Summary Data

Test Compound: **Folic acid**

CAS Number: **59-30-3**

Date Report Requested: **09/16/2018**

Time Report Requested: **17:24:01**

NTP Study Number:

A32205

Study Result:

Negative

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Test Compound: Folic acid

CAS Number: 59-30-3

Date Report Requested: 09/16/2018

Time Report Requested: 17:24:01

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	138 ± 5.8	116 ± 7.2	105 ± 3.5	167 ± 6.8	127 ± 7.2
100.0	137 ± 2.6	110 ± 1.3	100 ± 6.6	144 ± 12.2	129 ± 5.5
333.0	139 ± 9.5	106 ± 13.2	118 ± 2.7	158 ± 9.7	130 ± 13.7
1000.0	144 ± 4.7	112 ± 3.2	114 ± 11.5	148 ± 6.4	128 ± 7.8
3333.0	133 ± 1.2	115 ± 1.5	110 ± 9.6	180 ± 5.8	142 ± 4.3
10000.0	144 ± 2.9	110 ± 12.3	108 ± 19.3	170 ± 6.8	128 ± 5.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					1843 ± 92.6
Positive Control ³	444 ± 31.3	244 ± 11.2			
Positive Control ⁴			320 ± 23.4		
Positive Control ⁵					
Positive Control ⁶				850 ± 22.9	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	156 ± 1.9
100.0	152 ± 7.8
333.0	141 ± 8.6
1000.0	146 ± 3.8
3333.0	141 ± 5.1
10000.0	146 ± 3.2
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	825 ± 124.8
Positive Control ⁶	

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Date Report Requested: 09/16/2018

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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	12 ± 2.1	8 ± 2.3	11 ± 1.2	8 ± 0.6	18 ± 5.9
100.0	12 ± 1.0	10 ± 1.9	12 ± 1.0	7 ± 0.9	14 ± 2.5
333.0	14 ± 0.9	6 ± 0.9	11 ± 1.2	9 ± 1.5	19 ± 4.4
667.0		11 ± 3.1			
1000.0	23 ± 1.0	9 ± 1.5	13 ± 2.7	9 ± 1.2	20 ± 1.5
2000.0		8 ± 1.9			
3333.0	13 ± 1.2		8 ± 1.2	11 ± 0.3	14 ± 2.9
10000.0	14 ± 0.3		10 ± 2.5	16 ± 0.6	19 ± 2.6
Trial Summary	Equivocal	Negative	Negative	Negative	Negative
Positive Control ²					
Positive Control ³	364 ± 3.2	168 ± 10.3	82 ± 7.4		
Positive Control ⁵					
Positive Control ⁶				67 ± 22.5	258 ± 47.0

Experiment Number: A32205
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Test Compound: Folic acid
CAS Number: 59-30-3

Date Report Requested: 09/16/2018
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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	17 ± 1.9	15 ± 1.0
100.0	12 ± 1.2	17 ± 1.5
333.0	10 ± 2.6	15 ± 2.4
667.0		
1000.0	8 ± 2.0	15 ± 1.9
2000.0		
3333.0	11 ± 1.9	12 ± 1.5
10000.0	9 ± 1.2	14 ± 0.6
Trial Summary	Negative	Negative
Positive Control ²	84 ± 28.5	
Positive Control ³		
Positive Control ⁵		244 ± 10.2
Positive Control ⁶		

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Date Report Requested: 09/16/2018

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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	89 ± 3.8	130 ± 7.4	152 ± 10.3	150 ± 15.4	158 ± 5.0
100.0	86 ± 2.8	114 ± 11.0	144 ± 11.9	173 ± 8.3	146 ± 4.1
333.0	94 ± 11.5	122 ± 8.7	149 ± 16.6	172 ± 10.2	155 ± 5.4
1000.0	99 ± 3.2	120 ± 5.2	133 ± 7.0	159 ± 3.8	157 ± 7.1
2000.0					
3333.0	90 ± 3.2	135 ± 6.4	144 ± 8.4	162 ± 15.0	141 ± 16.8
5000.0					
10000.0	80 ± 5.2	135 ± 6.7	126 ± 13.1	172 ± 2.3	129 ± 4.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					1343 ± 36.7
Positive Control ⁶			670 ± 31.6	341 ± 33.3	
Positive Control ⁷	370 ± 38.7	387 ± 19.1			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	228 ± 24.7	149 ± 5.8
100.0	220 ± 17.6	
333.0	278 ± 11.0	159 ± 10.1
1000.0	285 ± 4.8	134 ± 15.1
2000.0		138 ± 16.3
3333.0	305 ± 7.2	154 ± 10.5
5000.0		141 ± 4.6
10000.0	302 ± 6.9	
Trial Summary	Equivocal	Negative
Positive Control ⁴		
Positive Control ⁶	631 ± 24.0	468 ± 10.3
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	22 ± 3.5	10 ± 0.6	12 ± 1.2	37 ± 1.3	16 ± 1.5
100.0	25 ± 3.2	13 ± 1.2	11 ± 2.4	30 ± 2.7	12 ± 1.9
333.0	23 ± 2.5	11 ± 3.2	13 ± 1.2	27 ± 5.2	11 ± 2.6
1000.0	20 ± 0.7	9 ± 1.8	13 ± 0.7	29 ± 3.0	16 ± 0.3
3333.0	19 ± 4.2	12 ± 1.2	14 ± 0.9	26 ± 2.0	12 ± 2.0
10000.0	18 ± 2.8	9 ± 1.2	11 ± 1.2	29 ± 1.0	13 ± 1.8
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			172 ± 25.3		863 ± 79.6
Positive Control ⁸	111 ± 4.8	208 ± 12.6			
Positive Control ⁵				200 ± 10.2	

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Test Compound: Folic acid

CAS Number: 59-30-3

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	27 ± 2.0
100.0	27 ± 3.1
333.0	28 ± 3.5
1000.0	27 ± 3.5
3333.0	26 ± 3.8
10000.0	26 ± 3.8
Trial Summary	Negative
Positive Control ²	
Positive Control ⁸	
Positive Control ⁵	520 ± 12.5

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Date Report Requested: 09/16/2018

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Strain: TA102

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	292 ± 25.1	299 ± 37.1	252 ± 12.3	326 ± 13.4	251 ± 11.1
100.0	268 ± 0.9	354 ± 13.7	247 ± 15.2	313 ± 34.0	258 ± 13.2
333.0	269 ± 6.8	354 ± 7.7	278 ± 18.2	357 ± 20.3	271 ± 9.4
1000.0	284 ± 6.7	347 ± 13.9	260 ± 6.4	329 ± 39.6	257 ± 17.6
3333.0	269 ± 4.7	325 ± 3.1	245 ± 14.8	301 ± 5.3	268 ± 6.9
10000.0	244 ± 5.0	338 ± 30.0	249 ± 21.2	303 ± 12.9	270 ± 11.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁹				971 ± 31.3	
Positive Control ¹⁰			1439 ± 62.0		1239 ± 136.0
Positive Control ¹¹	960 ± 37.2	1347 ± 44.7			

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Test Compound: Folic acid

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Date Report Requested: 09/16/2018

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Strain: TA102

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	268 ± 14.8
100.0	300 ± 11.5
333.0	245 ± 14.3
1000.0	274 ± 15.7
3333.0	244 ± 13.4
10000.0	272 ± 12.1
Trial Summary	Negative
Positive Control ⁹	1520 ± 12.9
Positive Control ¹⁰	
Positive Control ¹¹	

Experiment Number: A32205

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Test Compound: Folic acid

CAS Number: 59-30-3

Date Report Requested: 09/16/2018

Time Report Requested: 17:24:01

Strain: TA104

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9
Vehicle Control ¹	212 ± 8.5	297 ± 4.9	328 ± 4.2	297 ± 13.0	341 ± 4.5
100.0	233 ± 6.7	333 ± 10.7	323 ± 2.5	303 ± 12.1	343 ± 17.2
333.0	204 ± 7.4	274 ± 17.9	317 ± 30.2	278 ± 8.2	308 ± 7.5
1000.0	238 ± 8.0	285 ± 20.3	351 ± 13.0	249 ± 6.4	316 ± 17.9
3333.0	219 ± 8.7	272 ± 7.9	317 ± 12.9	344 ± 11.0	308 ± 15.8
10000.0	204 ± 9.4	277 ± 14.0	328 ± 26.1	378 ± 7.0	336 ± 3.2
Trial Summary	Negative	Negative	Negative	Equivocal	Negative
Positive Control ¹²			2036 ± 74.7	1256 ± 33.4	1246 ± 40.5
Positive Control ¹³	640 ± 24.1	845 ± 45.4			

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Strain: TA104

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	262 ± 16.8	296 ± 13.4
100.0	301 ± 0.9	297 ± 19.6
333.0	317 ± 20.3	268 ± 8.1
1000.0	304 ± 13.8	249 ± 9.0
3333.0	271 ± 20.5	269 ± 10.7
10000.0	286 ± 9.1	266 ± 7.9
Trial Summary	Negative	Negative
Positive Control ¹²	2180 ± 35.8	1633 ± 53.4
Positive Control ¹³		

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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: 0.4 ug/Plate 2-Aminoanthracene
- 3: 0.5 ug/Plate Sodium Azide
- 4: 0.75 ug/Plate 2-Aminoanthracene
- 5: 1.0 ug/Plate 2-Aminoanthracene
- 6: 2.0 ug/Plate 2-Aminoanthracene
- 7: 24.0 ug/Plate 9-Aminoacridine
- 8: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine
- 9: 5.0 ug/Plate Sterigmatocystin
- 10: 10.0 ug/Plate Sterigmatocystin
- 11: 75.0 ug/Plate Solvent
- 12: 4.0 ug/Plate 2-Aminoanthracene
- 13: 75.0 ug/Plate Methyl Methane Sulfonate

** END OF REPORT **