

Experiment Number: A21960

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

G06: Ames Summary Data

Test Compound: **5-Azacytidine**

CAS Number: **320-67-2**

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

Time Report Requested: **10:17:07**

NTP Study Number:

A21960

Study Result:

Positive

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Test Compound: 5-Azacytidine

CAS Number: 320-67-2

Date Report Requested: 09/16/2018

Time Report Requested: 10:17:07

Strain: TA100

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Rat S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	111 ± 3.8	127 ± 1.0	110 ± 3.4	109 ± 12.1	107 ± 1.8
0.3	93 ± 3.2		110 ± 3.0		104 ± 3.8
0.6			107 ± 2.5		113 ± 4.7
1.0	115 ± 7.7	168 ± 5.0	100 ± 4.4	161 ± 9.2	106 ± 8.6
1.6			96 ± 4.6		98 ± 5.0
3.0	115 ± 7.2	184 ± 14.4	85 ± 1.0	181 ± 3.5	91 ± 4.0
10.0	125 ± 0.3	115 ± 3.9		126 ± 7.8	
16.0	101 ± 5.0 ^s				
33.0		104 ± 2.7		144 ± 5.1	
100.0		102 ± 7.6 ^s		96 ± 3.6 ^s	
Trial Summary	Negative	Equivocal	Negative	Equivocal	Negative
Positive Control ²				603 ± 25.1	486 ± 37.9
Positive Control ³		792 ± 15.9	371 ± 11.5		
Positive Control ⁴	914 ± 8.0				

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 30% Rat S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	11 ± 1.7	11 ± 0.9	17 ± 2.4	15 ± 0.3	15 ± 0.9
0.3	12 ± 1.8	10 ± 0.6		16 ± 5.0	
1.0	19 ± 0.9	12 ± 1.5	30 ± 4.0	17 ± 2.0	30 ± 0.9
3.0	26 ± 3.4	15 ± 0.9	37 ± 4.0	36 ± 1.5	44 ± 2.3
10.0	25 ± 2.9	18 ± 0.3	49 ± 3.0	92 ± 6.0	45 ± 3.4
33.0	29 ± 5.0	22 ± 1.3	84 ± 2.6	100 ± 3.9	80 ± 5.2
100.0			18 ± 4.4		16 ± 3.5 ^s
Trial Summary	Positive	Weakly Positive	Positive	Positive	Positive
Positive Control ⁴	851 ± 7.9	399 ± 16.5			
Positive Control ³					321 ± 15.1
Positive Control ⁵			222 ± 6.6	190 ± 3.5	

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	13 ± 0.9
0.3	21 ± 3.2
1.0	23 ± 2.3
3.0	34 ± 5.2
10.0	102 ± 7.6
33.0	141 ± 9.1
100.0	
Trial Summary	Positive
Positive Control ⁴	
Positive Control ³	150 ± 14.8
Positive Control ⁵	

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Strain: TA97

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	123 ± 4.6	132 ± 11.7	132 ± 3.9
0.3	120 ± 9.7		
1.0	142 ± 8.4	161 ± 10.5	135 ± 3.2
3.0	106 ± 2.3	177 ± 2.4	173 ± 8.5
10.0	131 ± 22.7	107 ± 4.4	109 ± 4.3
33.0	112 ± 9.4	152 ± 7.8	146 ± 9.8
100.0		151 ± 7.0	144 ± 14.3
Trial Summary	Negative	Negative	Negative
Positive Control ²			481 ± 18.2
Positive Control ³		435 ± 23.4	
Positive Control ⁶	426 ± 13.0		

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Strain: TA98

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	13 ± 2.0	12 ± 1.8	15 ± 2.5
0.3	13 ± 2.1		
1.0	13 ± 2.2	15 ± 1.3	20 ± 1.5
3.0	11 ± 1.0	14 ± 2.6	18 ± 1.7
10.0	10 ± 0.6	11 ± 1.2	14 ± 1.9
16.0	6 ± 0.9 ^s		
33.0		12 ± 0.9	15 ± 1.0
100.0		4 ± 0.6 ^s	5 ± 1.0 ^s
Trial Summary	Negative	Negative	Negative
Positive Control ²			291 ± 13.3
Positive Control ⁷	328 ± 28.1		
Positive Control ³		669 ± 17.0	

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Strain: TA102

Dose (ug/Plate)	Without S9	Without S9	With 30% Rat S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	200 ± 16.3	205 ± 7.8	233 ± 24.1	276 ± 16.0	165 ± 19.7
0.01		220 ± 8.8			
0.03		249 ± 7.8		324 ± 13.9	
0.1		295 ± 13.4		365 ± 4.2	
0.3	800 ± 8.7	489 ± 22.2		663 ± 27.6	
1.0	1487 ± 37.8	810 ± 38.8	752 ± 11.6	1213 ± 167.6	390 ± 22.2
1.6					
3.0	0 ± 0.0 ^x		1333 ± 26.8	1425 ± 16.6	694 ± 15.5
10.0	0 ± 0.0 ^x		0 ± 0.0 ^x		0 ± 0.0 ^x
16.0	0 ± 0.0 ^x				
33.0			0 ± 0.0 ^x		0 ± 0.0 ^x
100.0			0 ± 0.0 ^x		0 ± 0.0 ^x
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control ⁸	937 ± 7.1	662 ± 38.2			
Positive Control ³					728 ± 5.9
Positive Control ⁵			551 ± 19.1	704 ± 17.8	

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CAS Number: 320-67-2

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Strain: TA102

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	285 ± 5.0
0.01	
0.03	
0.1	362 ± 15.4
0.3	640 ± 92.1
1.0	1096 ± 55.8
1.6	1295 ± 30.7
3.0	1560 ± 28.9
10.0	
16.0	
33.0	
100.0	
Trial Summary	Positive
Positive Control ⁸	
Positive Control ³	901 ± 35.1
Positive Control ⁵	

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Date Report Requested: 09/16/2018
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Strain: TA104

Dose (ug/Plate)	Without S9	Without S9	With 30% Rat S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	244 ± 21.9	243 ± 13.0	370 ± 19.3	317 ± 20.3	310 ± 11.1
0.03				307 ± 14.7	
0.1				339 ± 3.6	
0.3	284 ± 8.5	251 ± 2.7		388 ± 10.1	
1.0	330 ± 8.7	300 ± 18.5	510 ± 5.8	436 ± 9.6	475 ± 13.8
3.0	339 ± 9.9	376 ± 10.7	502 ± 13.3	448 ± 14.2	527 ± 3.2
10.0	376 ± 15.7	417 ± 11.1	330 ± 15.0		535 ± 2.3
16.0	490 ± 13.0	480 ± 12.1			
33.0			328 ± 25.7		692 ± 42.1
100.0			216 ± 0.7		233 ± 61.7
Trial Summary	Positive	Positive	Equivocal	Weakly Positive	Positive
Positive Control ⁹					647 ± 0.9
Positive Control ³			575 ± 19.7	828 ± 8.5	
Positive Control ¹⁰	660 ± 10.7	565 ± 6.4			

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Strain: TA104

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	372 ± 18.3
0.03	
0.1	
0.3	406 ± 31.2
1.0	502 ± 17.9
3.0	518 ± 3.3
10.0	536 ± 11.0
16.0	
33.0	884 ± 12.7
100.0	
Trial Summary	Positive
Positive Control ⁹	828 ± 10.1
Positive Control ³	
Positive Control ¹⁰	

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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: 2.0 ug/Plate 2-Aminoanthracene

3: 5.0 ug/Plate 2-Aminoanthracene

4: 5.0 ug/Plate Sodium Azide

5: 10.0 ug/Plate 2-Aminoanthracene

6: 50.0 ug/Plate 9-Aminoacridine

7: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

8: 0.5 ug/Plate Mitomycin-C

9: 2.5 ug/Plate 2-Aminoanthracene

10: 250.0 ug/Plate Methyl Methane Sulfonate

s: Slight Toxicity

x: Slight Toxicity and Precipitate

** END OF REPORT **