

Experiment Number: 785028

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

G06: Ames Summary Data

Test Compound: **Benzimidazole**

CAS Number: 51-17-2

Date Report Requested: **09/18/2018**

Time Report Requested: **05:25:02**

NTP Study Number:

785028

Study Result:

Negative

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Date Report Requested: 09/18/2018

Time Report Requested: 05:25:02

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	96 ± 4.3	95 ± 8.4	90 ± 5.8	123 ± 11.5	136 ± 24.4
33.0		90 ± 4.6			
100.0	98 ± 13.9	90 ± 5.2	84 ± 0.3	123 ± 9.0	142 ± 5.7
333.0	107 ± 2.3	102 ± 4.7	101 ± 6.2	127 ± 2.2	153 ± 3.5
1000.0	92 ± 4.9	110 ± 13.9	96 ± 4.7	114 ± 12.0	146 ± 4.4
3333.0	78 ± 2.3	101 ± 1.7	101 ± 5.5	110 ± 18.6	130 ± 3.3
6666.0	Toxic		87 ± 3.7	73 ± 3.7	104 ± 15.7
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					458 ± 84.4
Positive Control ³			339 ± 69.0	413 ± 11.3	
Positive Control ⁴	465 ± 9.3	497 ± 38.9			

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	133 ± 3.8
33.0	
100.0	124 ± 1.2
333.0	127 ± 13.6
1000.0	125 ± 9.2
3333.0	110 ± 6.9
6666.0	92 ± 2.9
Trial Summary	Negative
Positive Control ²	
Positive Control ³	380 ± 14.6
Positive Control ⁴	

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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	9 ± 1.5	12 ± 1.9	7 ± 1.8	12 ± 2.5	12 ± 0.3
33.0		19 ± 5.0			
100.0	8 ± 1.2	19 ± 2.8	10 ± 0.0	10 ± 1.9	12 ± 2.0
333.0	8 ± 0.6	19 ± 0.6	13 ± 2.6	11 ± 1.3	7 ± 2.0
1000.0	7 ± 1.5	17 ± 1.5	9 ± 0.7	11 ± 2.1	9 ± 2.7
3333.0	9 ± 1.2	11 ± 2.5	9 ± 1.0	8 ± 1.2	11 ± 2.1
6666.0	2 ± 0.9		7 ± 1.8	3 ± 1.5	5 ± 0.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					168 ± 20.4
Positive Control ⁴	267 ± 4.7	332 ± 14.2			
Positive Control ⁵			198 ± 10.7	100 ± 0.9	

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Test Compound: Benzimidazole

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Date Report Requested: 09/18/2018

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	10 ± 2.7
33.0	
100.0	12 ± 1.5
333.0	9 ± 2.0
1000.0	8 ± 0.7
3333.0	5 ± 0.9
6666.0	5 ± 1.3
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	310 ± 24.2

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Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	4 ± 0.6	5 ± 1.2	8 ± 1.7	8 ± 0.9	9 ± 2.3
33.0		8 ± 2.0			
100.0	6 ± 0.6	6 ± 0.7	9 ± 0.9	7 ± 0.6	6 ± 1.0
333.0	7 ± 0.6	6 ± 0.9	6 ± 1.3	8 ± 1.7	6 ± 0.9
1000.0	6 ± 0.6	8 ± 1.5	7 ± 2.1	9 ± 1.7	10 ± 2.1
3333.0	6 ± 0.5	7 ± 1.5	10 ± 1.5	7 ± 2.0	6 ± 1.5
6666.0	2 ± 1.2		5 ± 1.7	5 ± 2.0	5 ± 2.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					50 ± 2.9
Positive Control ³			43 ± 2.8		
Positive Control ⁵				56 ± 4.2	
Positive Control ⁶	301 ± 29.2	376 ± 62.4			

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Strain: TA1537

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	8 ± 2.3
33.0	
100.0	9 ± 1.2
333.0	6 ± 1.5
1000.0	6 ± 1.9
3333.0	7 ± 0.9
6666.0	6 ± 0.3
Trial Summary	Negative
Positive Control ²	
Positive Control ³	49 ± 2.8
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	153 ± 5.0	164 ± 12.2	177 ± 10.7	183 ± 9.2	166 ± 6.1
33.0		165 ± 6.1			
100.0	125 ± 11.5	180 ± 4.4	191 ± 5.2	95 ± 6.4	174 ± 12.8
333.0	148 ± 6.4	183 ± 9.0	180 ± 15.7	190 ± 11.7	184 ± 9.8
1000.0	127 ± 14.3	156 ± 31.4	201 ± 15.5	206 ± 1.5	184 ± 2.8
3333.0	92 ± 17.2	103 ± 3.3	167 ± 16.4	99 ± 27.0	171 ± 10.6
6666.0	0 ± 0.0 ^s		87 ± 3.6	139 ± 13.7	142 ± 4.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					613 ± 20.5
Positive Control ³			498 ± 3.9		
Positive Control ⁵				440 ± 6.9	
Positive Control ⁶	499 ± 49.7	986 ± 88.5			

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Test Compound: Benzimidazole

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Date Report Requested: 09/18/2018

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	152 ± 7.5
33.0	
100.0	179 ± 5.5
333.0	178 ± 8.2
1000.0	159 ± 17.6
3333.0	118 ± 2.0
6666.0	57 ± 8.3
Trial Summary	Negative
Positive Control ²	
Positive Control ³	396 ± 6.8
Positive Control ⁵	
Positive Control ⁶	

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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	38 ± 5.3	17 ± 2.9	17 ± 1.2	46 ± 3.6	31 ± 2.7
33.0		17 ± 1.7			
100.0	49 ± 2.8	19 ± 1.9	22 ± 2.2	52 ± 2.0	28 ± 1.2
333.0	39 ± 1.5	18 ± 2.1	24 ± 0.6	47 ± 4.4	30 ± 1.5
1000.0	46 ± 2.7	17 ± 1.9	24 ± 4.5	53 ± 2.3	25 ± 1.5
3333.0	37 ± 3.4	8 ± 1.9	20 ± 1.3	46 ± 3.1	26 ± 2.4
6666.0	9 ± 1.3		17 ± 3.3	31 ± 11.7	28 ± 1.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					384 ± 45.2
Positive Control ³			318 ± 33.8	111 ± 6.4	
Positive Control ⁷	477 ± 29.7	675 ± 40.9			

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	50 ± 2.1
33.0	
100.0	49 ± 4.4
333.0	50 ± 3.2
1000.0	49 ± 3.3
3333.0	42 ± 0.9
6666.0	32 ± 9.1
Trial Summary	Negative
Positive Control ²	
Positive Control ³	211 ± 7.1
Positive Control ⁷	

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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: 1.0 ug/Plate Sodium Azide

5: 2.5 ug/Plate 2-Aminoanthracene

6: 50.0 ug/Plate 9-Aminoacridine

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

s: Slight Toxicity

**** END OF REPORT ****