

Experiment Number: 603477

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: tert-Butyl hydroperoxide

CAS Number: 75-91-2

Date Report Requested: 09/15/2018

Time Report Requested: 00:41:36

NTP Study Number:

603477

Study Result:

Positive

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	135 ± 13.0	106 ± 23.1	109 ± 18.1	173 ± 9.2	153 ± 12.9
3.3	133 ± 9.0			176 ± 3.5	
10.0	172 ± 3.1			205 ± 10.7	
16.7		84 ± 6.8	87 ± 11.5		152 ± 9.5
33.0	292 ± 7.1	155 ± 38.4	115 ± 12.3	357 ± 6.9	235 ± 41.5
66.0		129 ± 10.3	108 ± 4.6		138 ± 6.7
100.0	266 ± 6.5	159 ± 25.1	113 ± 15.0	164 ± 15.0	145 ± 2.3
167.0		119 ± 9.4	87 ± 16.5		Toxic
333.0	102 ± 0.5			Toxic	
Trial Summary	Positive	Negative	Negative	Positive	Negative
Positive Control ²				2879 ± 23.2	1718 ± 37.6
Positive Control ³	2525 ± 19.9	505 ± 34.6	381 ± 21.5		

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Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	142 ± 11.0	165 ± 15.5	140 ± 16.9	141 ± 8.7
3.3		171 ± 5.9		
10.0		177 ± 8.3		
16.7	195 ± 17.3		129 ± 7.8	175 ± 13.9
33.0	262 ± 8.7	334 ± 14.0	213 ± 35.4	255 ± 7.5
66.0	123 ± 13.2		175 ± 12.0	156 ± 17.4
100.0	108 ± 13.9	162 ± 10.5	167 ± 21.2	119 ± 25.4
167.0	Toxic		157 ± 28.5	158 ± 8.6
333.0		Toxic		
Trial Summary	Equivocal	Positive	Negative	Equivocal
Positive Control ²	2089 ± 49.8	812 ± 48.0	1979 ± 78.2	1822 ± 14.6
Positive Control ³				

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Strain: TA1535

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	8 ± 1.5	8 ± 1.2	6 ± 1.2
3.3	5 ± 0.6	3 ± 0.6	7 ± 0.3
10.0	7 ± 1.7	9 ± 1.0	5 ± 0.3
33.0	8 ± 1.2	7 ± 0.9	8 ± 0.7
100.0	7 ± 1.2	6 ± 1.2	9 ± 1.0
333.0	10 ± 2.0	Toxic	Toxic
Trial Summary	Negative	Negative	Negative
Positive Control ²		96 ± 5.8	111 ± 4.8
Positive Control ³	505 ± 32.0		

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Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	4 ± 0.3	4 ± 0.3	6 ± 1.5	9 ± 2.7	10 ± 0.9
3.3	5 ± 1.2		5 ± 0.6		8 ± 0.7
10.0	6 ± 0.3		9 ± 1.5		6 ± 0.0
16.7		26 ± 1.2		27 ± 5.1	
33.0	20 ± 3.5	36 ± 7.2	17 ± 0.6	39 ± 11.3	28 ± 0.9
66.0		33 ± 6.4		7 ± 2.0	
100.0	20 ± 1.9	26 ± 2.7	Toxic	10 ± 0.7	14 ± 1.8
167.0		10 ± 0.3		Toxic	
333.0	7 ± 0.3		4 ± 0.6		13 ± 1.2
Trial Summary	Positive	Positive	Equivocal	Positive	Equivocal
Positive Control ²			247 ± 15.6	169 ± 4.3	142 ± 4.1
Positive Control ⁴	1847 ± 118.6	1857 ± 236.6			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	9 ± 2.3
3.3	
10.0	
16.7	13 ± 1.5
33.0	25 ± 2.4
66.0	39 ± 0.9
100.0	17 ± 2.0
167.0	Toxic
333.0	
Trial Summary	Positive
Positive Control ²	52 ± 4.3
Positive Control ⁴	

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Strain: TA98

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	23 ± 5.2	26 ± 4.0	23 ± 5.5
3.3	18 ± 2.5	23 ± 1.5	31 ± 2.7
10.0	28 ± 2.3	31 ± 1.8	20 ± 2.8
33.0	33 ± 2.9	54 ± 3.5	43 ± 4.2
100.0	Toxic	22 ± 0.5	26 ± 2.3
333.0	Toxic	Toxic	Toxic
Trial Summary	Equivocal	Equivocal	Equivocal
Positive Control ²		1033 ± 76.1	1253 ± 51.0
Positive Control ⁵	294 ± 9.4		

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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: 3.3 ug/Plate Sodium Azide

4: 33.0 ug/Plate 9-Aminoacridine

5: 3.3 ug/Plate 4-Nitro-O-Phenylenediamine

**** END OF REPORT ****