

Experiment Number: A71156

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

G06: Ames Summary Data

Test Compound: **t-Butylhydroquinone**

CAS Number: **1948-33-0**

Date Report Requested: **09/17/2018**

Time Report Requested: **18:26:20**

NTP Study Number:

A71156

Study Result:

Equivocal

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Test Compound: t-Butylhydroquinone
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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	126 ± 5.5	170 ± 27.7	132 ± 7.0	166 ± 6.1	148 ± 8.7
100.0	114 ± 0.6	182 ± 18.2	134 ± 5.8	155 ± 3.5	135 ± 2.3
333.0	129 ± 16.3	139 ± 6.4	159 ± 28.5	157 ± 3.5	149 ± 6.7
1000.0	124 ± 10.3	146 ± 8.4	148 ± 3.4	162 ± 7.2	173 ± 21.2
3333.0	148 ± 0.3 ^P	149 ± 10.1 ^P	115 ± 4.3 ^P	158 ± 12.8 ^P	128 ± 9.8 ^P
10000.0	Toxic	183 ± 7.5 ^P	124 ± 2.8 ^P	160 ± 5.5 ^P	124 ± 2.6 ^P
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			699 ± 18.2		1431 ± 140.1
Positive Control ³	450 ± 15.1	406 ± 12.3			
Positive Control ⁴				456 ± 6.3	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	110 ± 3.8	153 ± 7.1
100.0	148 ± 9.6	142 ± 15.1
333.0	154 ± 9.5	176 ± 13.1
1000.0	149 ± 7.8	133 ± 6.8
3333.0	153 ± 6.4 ^p	151 ± 2.3 ^p
10000.0	140 ± 6.0 ^p	140 ± 2.2 ^p
Trial Summary	Equivocal	Negative
Positive Control ²	777 ± 54.0	712 ± 31.4
Positive Control ³		
Positive Control ⁴		

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	12 ± 3.1	13 ± 1.9	18 ± 1.9	14 ± 3.5	10 ± 2.3
100.0	10 ± 2.3	12 ± 3.6	16 ± 1.0	12 ± 1.7	8 ± 0.0
333.0	11 ± 1.5	19 ± 3.5	20 ± 0.9	10 ± 2.2	9 ± 0.5
1000.0	15 ± 1.9	13 ± 2.9	15 ± 1.9	15 ± 1.0	13 ± 2.3
3333.0	10 ± 2.3 ^p	12 ± 0.3 ^p	12 ± 3.0 ^p	17 ± 3.1 ^p	10 ± 0.9 ^p
10000.0	7 ± 1.0 ^p	9 ± 2.3 ^p	12 ± 2.0 ^p	8 ± 1.5 ^p	8 ± 1.2 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³	464 ± 11.2	384 ± 11.7			
Positive Control ²			60 ± 2.6	92 ± 4.6	174 ± 21.0

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	9 ± 0.3
100.0	14 ± 3.0
333.0	11 ± 4.4
1000.0	14 ± 1.3
3333.0	9 ± 1.2 ^p
10000.0	8 ± 0.5 ^p
Trial Summary	Negative
Positive Control ³	
Positive Control ²	331 ± 43.5

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Strain: TA1538

Dose (ug/Plate)	Without S9
Vehicle Control ¹	18 ± 2.3
100.0	25 ± 1.2
333.0	23 ± 1.7
1000.0	25 ± 2.6
3333.0	25 ± 1.9 ^p
10000.0	6 ± 1.7 ^s
Trial Summary	Negative
Positive Control ⁵	269 ± 9.9

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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	78 ± 9.0	86 ± 5.4	146 ± 4.3	177 ± 13.9	123 ± 3.4
100.0	85 ± 12.3	113 ± 11.8	142 ± 5.5	149 ± 7.4	115 ± 0.6
333.0	101 ± 10.8	113 ± 13.3	144 ± 16.8	145 ± 4.4	104 ± 3.8
1000.0	71 ± 11.9	119 ± 9.1	118 ± 10.7	165 ± 1.5	123 ± 4.3
3333.0	89 ± 5.8 ^p	117 ± 4.8 ^p	123 ± 9.8 ^p	154 ± 2.6 ^p	122 ± 2.0 ^p
10000.0	86 ± 5.5 ^p	115 ± 8.4 ^p	110 ± 6.7 ^p	143 ± 4.5 ^p	120 ± 11.0 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			636 ± 19.6		1128 ± 39.6
Positive Control ⁴				458 ± 35.3	
Positive Control ⁶	406 ± 18.1	433 ± 37.6			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	147 ± 3.1
100.0	115 ± 14.8
333.0	126 ± 7.2
1000.0	131 ± 1.7
3333.0	146 ± 8.0 ^p
10000.0	108 ± 5.5 ^p
Trial Summary	Negative
Positive Control ²	663 ± 24.4
Positive Control ⁴	
Positive Control ⁶	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control ¹	30 ± 4.6	15 ± 1.3	22 ± 2.7	26 ± 2.0	24 ± 3.5
100.0	22 ± 3.0	18 ± 5.5	24 ± 5.0		39 ± 5.5
333.0	33 ± 3.6	18 ± 1.2	21 ± 5.5		35 ± 5.0
1000.0	33 ± 2.3	19 ± 1.5	28 ± 2.2	20 ± 2.9	32 ± 2.7
1666.0				26 ± 2.5	
3333.0	36 ± 4.3 ^p	44 ± 6.0 ^p	46 ± 3.0 ^p	35 ± 2.7 ^p	29 ± 0.6 ^p
6666.0				46 ± 3.0 ^p	
10000.0	35 ± 10.5 ^p	55 ± 2.5 ^p	27 ± 3.8 ^p	28 ± 1.7 ^p	26 ± 7.5 ^p
Trial Summary	Negative	Positive	Equivocal	Equivocal	Negative
Positive Control ⁵	245 ± 10.5	230 ± 23.6	183 ± 4.9	240 ± 8.1	
Positive Control ²					750 ± 23.7

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Strain: TA98

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	35 ± 3.3	27 ± 3.8	34 ± 2.9
100.0	32 ± 3.2	29 ± 1.0	35 ± 2.5
333.0	36 ± 4.0	38 ± 0.9	36 ± 1.5
1000.0	33 ± 3.5	38 ± 3.1	47 ± 1.5
1666.0			
3333.0	32 ± 4.1 ^p	31 ± 5.2 ^p	39 ± 1.0 ^p
6666.0			
10000.0	38 ± 2.8 ^p	27 ± 2.5 ^p	29 ± 4.9 ^p
Trial Summary	Negative	Negative	Negative
Positive Control ⁵			
Positive Control ²	216 ± 26.7	1800 ± 42.5	654 ± 42.9

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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: 1.0 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate Sodium Azide

4: 2.0 ug/Plate 2-Aminoanthracene

5: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

6: 50.0 ug/Plate 9-Aminoacridine

p: Precipitate

s: Slight Toxicity

**** END OF REPORT ****