Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

NTP Study Number: 021139

Study Result: Negative

Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control[1]	125 ± 20.4	136 ± 5.5	76 ± 2.4	156 ± 17.0	179 ± 4.3
1.0		113 ± 7.4	78 ± 4.3		
3.3	115 ± 8.7	119 ± 7.1	72 ± 5.2		
10.0	84 ± 5.2	117 ± 5.5	82 ± 4.0	183 ± 8.1	167 ± 5.5
33.0	96 ± 2.4	113 ± 13.6	80 ± 9.0	186 ± 3.8	168 ± 2.9
100.0	Toxic	Toxic	Toxic	166 ± 9.5	186 ± 6.4
333.0	Toxic			114 ± 3.9	179 ± 16.6
1000.0				Toxic	140 ± 2.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]				2372 ± 106.4	931 ± 9.0
Positive Control[3]	1587 ± 123.1	1577 ± 13.4	992 ± 3.3		

Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control[1]	192 ± 7.8	190 ± 12.0
1.0		
3.3		
10.0	165 ± 8.3	144 ± 6.6
33.0	168 ± 11.3	161 ± 6.4
100.0	175 ± 9.5	147 ± 32.2
333.0	147 ± 5.8	165 ± 19.6
1000.0	Toxic	128 ± 0.9
Trial Summary	Negative	Negative
Positive Control[2]	1871 ± 98.8	2839 ± 81.2
Positive Control[3]		

Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control[1]	14 ± 1.7	28 ± 0.9	6 ± 2.3	14 ± 1.0	18 ± 2.4
0.3		24 ± 1.5	5 ± 2.3		
1.0		25 ± 4.0	4 ± 0.3		
3.3	14 ± 0.9	27 ± 2.7	6 ± 1.5		
10.0	11 ± 1.5	21 ± 0.7	4 ± 0.3	10 ± 0.6	16 ± 3.9
33.0	Toxic	19 ± 4.2	Toxic	11 ± 2.1	15 ± 2.6
100.0	Toxic			17 ± 5.2	18 ± 4.2
333.0	Toxic			12 ± 0.3	15 ± 4.1
1000.0				11 ± 2.7	16 ± 3.4
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[4]				299 ± 16.1	531 ± 38.7
Positive Control[3]	1176 ± 98.1	1056 ± 52.7	393 ± 26.8		

Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control[1]	12 ± 0.3	22 ± 1.0
0.3		
1.0		
3.3		
10.0	16 ± 1.5	11 ± 2.3
33.0	13 ± 1.5	15 ± 1.8
100.0	14 ± 1.0	16 ± 1.5
333.0	12 ± 0.0	18 ± 4.6
1000.0	Toxic	18 ± 0.5
Trial Summary	Negative	Negative
Positive Control[4]	388 ± 40.9	363 ± 24.3
Positive Control[3]		

Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	8 ± 1.5	16 ± 1.7	13 ± 2.5	14 ± 1.9	17 ± 3.5
3.3	8 ± 1.3	9 ± 1.8			
10.0	6 ± 1.7	8 ± 0.6	10 ± 2.4	18 ± 4.0	19 ± 3.5
33.0	6 ± 2.0	8 ± 2.0	11 ± 4.1	15 ± 0.7	18 ± 1.9
100.0	7 ± 0.5	2 ± 0.5	18 ± 1.9	7 ± 2.7	9 ± 2.0
333.0	2 ± 1.5	Toxic	10 ± 2.4	10 ± 2.1	15 ± 1.7
1000.0			11 ± 2.6	8 ± 7.0	Toxic
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[4]			77 ± 10.4	406 ± 46.2	106 ± 4.6
Positive Control[5]	483 ± 8.7	756 ± 92.1			

Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	21 ± 2.6
3.3	
10.0	22 ± 3.6
33.0	19 ± 1.2
100.0	14 ± 2.9
333.0	19 ± 3.5
1000.0	27 ± 2.5
Trial Summary	Negative
Positive Control[4]	139 ± 36.0
Positive Control[5]	

Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control[1]	21 ± 3.7	30 ± 9.4	18 ± 2.7	30 ± 3.5	38 ± 5.5
1.0		30 ± 3.5	17 ± 4.3		
3.3	19 ± 1.5	25 ± 3.1	16 ± 2.6		
10.0	14 ± 1.9	25 ± 0.7	11 ± 2.0	35 ± 3.6	29 ± 3.5
33.0	16 ± 2.0	29 ± 4.7	16 ± 4.5	35 ± 3.2	29 ± 4.7
100.0	Toxic	31 ± 3.3	Toxic	33 ± 8.3	22 ± 3.8
333.0	Toxic			35 ± 4.8	26 ± 0.9
1000.0				33 ± 4.4	Toxic
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]				1639 ± 165.0	483 ± 12.5
Positive Control[6]	434 ± 6.9	207 ± 27.6	204 ± 13.6		

Experiment Number: **021139**

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

G06: Ames Summary Data

Test Compound: **p-tert-Butyltoluene**

CAS Number: **98-51-1**

Date Report Requested: **09/14/2018**

Time Report Requested: **12:46:02**

Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control[1]	34 ± 0.3	30 ± 2.3
1.0		
3.3		
10.0	29 ± 2.3	27 ± 2.8
33.0	30 ± 2.3	34 ± 9.7
100.0	38 ± 5.3	27 ± 2.8
333.0	40 ± 5.9	29 ± 6.4
1000.0	35 ± 3.8	22 ± 6.2
Trial Summary	Negative	Negative
Positive Control[2]	1170 ± 78.2	335 ± 78.2
Positive Control[6]		

LEGEND

Values given as Mean or Mean ± 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: 3.3 ug/Plate Sodium Azide
4: 2.0 ug/Plate 2-Aminoanthracene
5: 33.0 ug/Plate 9-Aminoacridine
6: 3.3 ug/Plate 4-Nitro-O-Phenylenediamine

** END OF REPORT **