Experiment Number: **165798**

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

G06: Ames Summary Data

Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

Time Report Requested: **21:44:37**

NTP Study Number: 165798

Study Result: Negative

Experiment Number: **165798**

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

G06: Ames Summary Data

Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

Time Report Requested: **21:44:37**

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	117 ± 5.5	82 ± 9.2	130 ± 3.5	85 ± 0.9	111 ± 6.8
0.1	136 ± 4.0	100 ± 9.0	134 ± 7.7	73 ± 1.5	111 ± 8.0
0.3	110 ± 6.8	114 ± 9.6	159 ± 14.0	78 ± 4.8	113 ± 6.7
1.0	114 ± 9.5	77 ± 10.0	129 ± 3.8	69 ± 4.9	110 ± 14.0
3.3	111 ± 7.0	80 ± 5.0	137 ± 6.8	91 ± 0.3	117 ± 15.0
10.0	74 ± 1.5[s]	64 ± 7.3[s]	123 ± 8.7	91 ± 2.3	133 ± 5.8
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]					2051 ± 40.1
Positive Control[3]			1216 ± 21.4	1059 ± 49.6	
Positive Control[4]	1392 ± 16.2	1432 ± 7.4			

Experiment Number: **165798**

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

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Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	66 ± 9.0
0.1	70 ± 3.8
0.3	63 ± 2.6
1.0	67 ± 6.4
3.3	70 ± 4.9
10.0	66 ± 5.1
Trial Summary	Negative
Positive Control[2]	2090 ± 177.7
Positive Control[3]	
Positive Control[4]	

Experiment Number: **165798**

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

G06: Ames Summary Data

Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

Time Report Requested: **21:44:37**

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	11 ± 1.5	17 ± 0.9	10 ± 2.9	11 ± 1.2	8 ± 0.3
0.1	17 ± 2.1	22 ± 6.2	9 ± 1.2	10 ± 2.1	8 ± 0.6
0.3	18 ± 1.7	18 ± 4.8	9 ± 0.9	10 ± 0.3	9 ± 1.0
1.0	17 ± 4.7	11 ± 2.1	12 ± 1.2	12 ± 2.0	7 ± 1.5
3.3	13 ± 1.5	14 ± 2.3	8 ± 0.3	10 ± 1.2	10 ± 1.7
10.0	10 ± 0.6[s]	11 ± 0.6[s]	11 ± 4.4	9 ± 2.5	6 ± 0.6
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]					127 ± 1.7
Positive Control[3]			90 ± 8.5	96 ± 3.5	
Positive Control[4]	936 ± 18.1	1149 ± 38.6			

Experiment Number: **165798**

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

G06: Ames Summary Data

Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

Time Report Requested: **21:44:37**

Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	8 ± 1.5
0.1	7 ± 1.2
0.3	12 ± 5.4
1.0	5 ± 1.5
3.3	8 ± 1.5
10.0	8 ± 1.5
Trial Summary	Negative
Positive Control[2]	186 ± 6.2
Positive Control[3]	
Positive Control[4]	

Experiment Number: **165798**

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

G06: Ames Summary Data

Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

Time Report Requested: **21:44:37**

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	7 ± 1.0	5 ± 2.3	6 ± 2.0	11 ± 0.3	9 ± 0.9
0.1	6 ± 0.7	6 ± 0.6	9 ± 1.7	13 ± 2.2	6 ± 0.9
0.3	11 ± 1.0	10 ± 0.3	7 ± 0.6	10 ± 1.0	11 ± 1.2
1.0	8 ± 0.7	6 ± 2.0	7 ± 0.7	7 ± 0.3	7 ± 0.7
3.0					
3.3	6 ± 1.2	8 ± 0.0	7 ± 1.7	9 ± 2.2	8 ± 1.2
10.0	5 ± 0.7[s]	7 ± 1.2[s]	7 ± 1.5	8 ± 0.7	6 ± 1.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]					157 ± 13.8
Positive Control[3]			85 ± 1.8	103 ± 9.3	
Positive Control[5]	358 ± 48.6	918 ± 154.3			

Experiment Number: **165798**

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

G06: Ames Summary Data

Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

Time Report Requested: **21:44:37**

Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	5 ± 0.3
0.1	3 ± 1.2
0.3	6 ± 1.5
1.0	5 ± 1.0
3.0	7 ± 0.9
3.3	
10.0	2 ± 1.3
Trial Summary	Negative
Positive Control[2]	177 ± 25.4
Positive Control[3]	
Positive Control[5]	

Experiment Number: **165798**

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

G06: Ames Summary Data

Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

Time Report Requested: **21:44:37**

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	18 ± 2.0	22 ± 2.7	28 ± 2.7	27 ± 1.2	27 ± 0.6
0.1	20 ± 4.0	18 ± 3.8	24 ± 0.9	19 ± 2.3	28 ± 4.5
0.3	17 ± 1.0	20 ± 2.3	27 ± 3.8	25 ± 3.1	28 ± 2.3
1.0	16 ± 3.2	21 ± 2.0	20 ± 1.0	27 ± 1.2	21 ± 2.0
3.3	20 ± 2.4	17 ± 0.3	22 ± 2.0	31 ± 4.1	30 ± 3.6
10.0	11 ± 2.4[s]	11 ± 2.7[s]	28 ± 1.2	24 ± 2.5	18 ± 2.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]					1943 ± 36.3
Positive Control[3]			1219 ± 21.2	1118 ± 101.5	
Positive Control[6]	1797 ± 38.0	1851 ± 86.9			

Experiment Number: **165798**

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

G06: Ames Summary Data

Test Compound: **D-Limonene dimercaptan**

CAS Number: **4802-20-4**

Date Report Requested: **09/12/2018**

Time Report Requested: **21:44:37**

Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	21 ± 1.2
0.1	18 ± 1.5
0.3	17 ± 3.4
1.0	21 ± 2.0
3.3	18 ± 1.2
10.0	23 ± 5.5
Trial Summary	Negative
Positive Control[2]	1943 ± 91.9
Positive Control[3]	
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: 0.75 ug/Plate 2-Aminoanthracene
3: 1.5 ug/Plate 2-Aminoanthracene
4: 2.5 ug/Plate Sodium Azide
5: 80.0 ug/Plate 9-Aminoacridine
6: 12.0 ug/Plate 4-Nitro-O-Phenylenediamine
s: Slight Toxicity

** END OF REPORT **