Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

NTP Study Number: 196941

Study Result: Negative

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control[1]		93 ± 1.7	118 ± 6.7		
Vehicle Control[2]	132 ± 2.8			160 ± 10.0	135 ± 19.8
0.01		94 ± 10.7			
0.05		101 ± 6.7			
0.1		78 ± 1.8			
0.5		88 ± 7.8	157 ± 8.8		
1.0		102 ± 6.1	128 ± 9.3		
2.5			131 ± 9.9		
5.0			141 ± 10.9		
100.0				180 ± 5.0	161 ± 1.5
333.0	132 ± 5.8			162 ± 4.9	161 ± 5.6
1000.0	124 ± 8.4			148 ± 3.2	153 ± 11.3
3333.0	151 ± 8.3			109 ± 2.0	124 ± 11.6
10000.0	125 ± 5.2			94 ± 13.5[s]	112 ± 2.1
15000.0	107 ± 20.0				
Trial Summary	Negative	Negative	Equivocal	Negative	Negative
Positive Control[3]					
Positive Control[4]					
Positive Control[5]		464 ± 27.6	414 ± 6.0		
Positive Control[6]					585 ± 32.7
Positive Control[7]	443 ± 10.6				
Positive Control[8]				295 ± 7.5	
Positive Control[9]					
Positive Control[10]					

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA100

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control[1]		124 ± 6.1	165 ± 6.6		
Vehicle Control[2]	147 ± 2.3			152 ± 13.3	139 ± 1.2
0.01		119 ± 4.2			
0.05		119 ± 4.8			
0.1		104 ± 10.4			
0.5		114 ± 12.1	168 ± 3.5		
1.0		98 ± 1.7	146 ± 3.3		
2.5			158 ± 10.3		
5.0			155 ± 2.3		
100.0				144 ± 18.5	
333.0	150 ± 2.5			152 ± 6.4	126 ± 12.9
1000.0	134 ± 4.0			146 ± 16.5	122 ± 11.3
3333.0	152 ± 5.2			141 ± 19.0	107 ± 4.4
10000.0	138 ± 1.2			115 ± 18.9	89 ± 9.7
15000.0	118 ± 8.9[s]				89 ± 5.5[s]
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[3]				797 ± 27.7	
Positive Control[4]					
Positive Control[5]					
Positive Control[6]					728 ± 53.8
Positive Control[7]					
Positive Control[8]					
Positive Control[9]	703 ± 17.4				
Positive Control[10]		516 ± 7.6	421 ± 9.1		

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	132 ± 7.4	186 ± 13.3
Vehicle Control[2]		
0.01	108 ± 1.8	
0.05	91 ± 2.9	
0.1	106 ± 4.7	
0.5	104 ± 3.5	160 ± 3.8
1.0	123 ± 15.0	161 ± 13.6
2.5		157 ± 7.8
5.0		158 ± 6.2
100.0		
333.0		
1000.0		
3333.0		
10000.0		
15000.0		
Trial Summary	Negative	Negative
Positive Control[3]		
Positive Control[4]	715 ± 17.0	491 ± 45.0
Positive Control[5]		
Positive Control[6]		
Positive Control[7]		
Positive Control[8]		
Positive Control[9]		
Positive Control[10]		

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control[2]	23 ± 2.9	23 ± 4.3	14 ± 2.0	12 ± 0.3	13 ± 0.6
100.0	14 ± 2.6	20 ± 3.2	13 ± 1.2	11 ± 2.8	8 ± 1.9
333.0	16 ± 4.9	18 ± 1.5	14 ± 2.8	18 ± 3.3	11 ± 0.9
1000.0	6 ± 0.6	17 ± 2.7	13 ± 1.5	10 ± 1.5	7 ± 0.3
3333.0	7 ± 1.9	16 ± 3.1	11 ± 2.3	13 ± 0.3	9 ± 1.2
10000.0	11 ± 4.4	12 ± 0.3	7 ± 1.8	13 ± 0.7	5 ± 1.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[6]					222 ± 11.7
Positive Control[8]	206 ± 5.6	276 ± 10.4			
Positive Control[9]			132 ± 3.1		
Positive Control[11]				86 ± 3.8	

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control[2]	12 ± 0.7
100.0	10 ± 3.3
333.0	11 ± 2.3
1000.0	8 ± 0.7
3333.0	10 ± 3.5
10000.0	9 ± 2.6
Trial Summary	Negative
Positive Control[6]	
Positive Control[8]	
Positive Control[9]	392 ± 59.3
Positive Control[11]	

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control[2]	154 ± 12.5	179 ± 15.6	211 ± 6.8	201 ± 5.8	207 ± 5.2
100.0	148 ± 0.3	194 ± 9.2	218 ± 2.7	181 ± 5.3	200 ± 7.5
333.0	150 ± 6.9	197 ± 9.7	239 ± 1.7	195 ± 9.3	191 ± 8.4
1000.0	171 ± 6.4	189 ± 0.6	190 ± 10.5	177 ± 5.3	191 ± 11.3
3333.0	122 ± 5.4	214 ± 12.1	174 ± 14.0	207 ± 16.3	173 ± 3.8
10000.0	146 ± 25.2	144 ± 13.0	161 ± 28.1	166 ± 17.2	162 ± 7.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[3]					505 ± 10.3
Positive Control[6]			346 ± 6.8		
Positive Control[9]				455 ± 13.9	
Positive Control[12]	545 ± 18.2	424 ± 2.0			

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control[2]	178 ± 15.9
100.0	206 ± 13.0
333.0	182 ± 16.5
1000.0	219 ± 5.3
3333.0	217 ± 4.4
10000.0	211 ± 13.6
Trial Summary	Negative
Positive Control[3]	
Positive Control[6]	452 ± 37.0
Positive Control[9]	
Positive Control[12]	

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	With 10% Rat S9
Vehicle Control[1]		15 ± 2.6	18 ± 1.5		
Vehicle Control[2]	33 ± 3.7			16 ± 1.2	40 ± 7.4
0.01		11 ± 2.9			
0.05		16 ± 1.0			
0.1		15 ± 3.0			
0.5		17 ± 1.5	17 ± 0.6		
1.0		13 ± 1.9	23 ± 3.2		
2.5			23 ± 2.2		
5.0			22 ± 3.1		
100.0				14 ± 1.5	36 ± 1.5
333.0	30 ± 1.5			22 ± 3.4	29 ± 0.6
1000.0	33 ± 5.3			18 ± 1.5	31 ± 3.8
3333.0	33 ± 5.8			19 ± 0.7	25 ± 2.3
10000.0	30 ± 5.1			16 ± 1.7	28 ± 3.7
15000.0	25 ± 2.7				
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[3]					
Positive Control[4]					
Positive Control[6]					338 ± 7.0
Positive Control[13]	374 ± 15.0			530 ± 18.7	
Positive Control[14]		619 ± 16.5	709 ± 22.2		

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA98

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control[1]		26 ± 1.9	32 ± 1.0		
Vehicle Control[2]	38 ± 2.6			28 ± 1.0	41 ± 4.6
0.01		15 ± 2.5			
0.05		22 ± 3.3			
0.1		22 ± 2.2			
0.5		16 ± 1.2	33 ± 5.1		
1.0		17 ± 2.0	25 ± 0.9		
2.5			24 ± 0.3		
5.0			27 ± 1.5		
100.0				22 ± 2.6	
333.0	40 ± 5.2			27 ± 3.5	33 ± 3.2
1000.0	37 ± 4.6			34 ± 3.7	33 ± 4.7
3333.0	33 ± 4.0			20 ± 0.7	32 ± 5.0
10000.0	32 ± 2.9			21 ± 4.5	35 ± 5.8
15000.0	29 ± 7.0				34 ± 1.7
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[3]				585 ± 18.1	
Positive Control[4]		161 ± 10.5	89 ± 4.1		
Positive Control[6]	162 ± 1.2				318 ± 18.6
Positive Control[13]					
Positive Control[14]					

Experiment Number: **196941**

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

G06: Ames Summary Data

Test Compound: **2,2-Dimethylbutane**

CAS Number: **75-83-2**

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

Time Report Requested: **07:54:08**

Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	24 ± 3.2	31 ± 1.2
Vehicle Control[2]		
0.01	17 ± 1.9	
0.05	23 ± 2.8	
0.1	27 ± 0.7	
0.5	27 ± 1.2	26 ± 2.0
1.0	21 ± 3.5	27 ± 3.5
2.5		23 ± 1.0
5.0		24 ± 1.3
100.0		
333.0		
1000.0		
3333.0		
10000.0		
15000.0		
Trial Summary	Negative	Negative
Positive Control[3]		
Positive Control[4]	487 ± 27.5	287 ± 28.6
Positive Control[6]		
Positive Control[13]		
Positive Control[14]		

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: 4-Nitro-o-Phenylenediamine
2: Vehicle Control: Dimethyl Sulfoxide
3: 0.5 ug/Plate 2-Aminoanthracene
4: 1.0 mL/Chamber 2-Aminoanthracene
5: 1.0 mL/Chamber Sodium Azide
6: 1.0 ug/Plate 2-Aminoanthracene
7: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine
8: 1.0 ug/Plate Sodium Azide
9: 2.5 ug/Plate 2-Aminoanthracene
10: 2.5 mL/Chamber 2-Aminoanthracene
11: 5.0 ug/Plate 2-Aminoanthracene
12: 50.0 ug/Plate 9-Aminoacridine
13: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
14: 2.5 mL/Chamber 4-Nitro-O-Phenylenediamine
s: Slight Toxicity

** END OF REPORT **