Experiment Number: **611954**

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

G06: Ames Summary Data

Test Compound: **3,3'-Dichlorobenzidine dihydrochloride**

CAS Number: **612-83-9**

Date Report Requested: **09/15/2018**

Time Report Requested: **06:46:08**

NTP Study Number: 611954

Study Result: Positive

Experiment Number: **611954**

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

G06: Ames Summary Data

Test Compound: **3,3'-Dichlorobenzidine dihydrochloride**

CAS Number: **612-83-9**

Date Report Requested: **09/15/2018**

Time Report Requested: **06:46:08**

Strain: TA100

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control[1]	121 ± 6.1	101 ± 8.2	108 ± 4.2	116 ± 9.0	116 ± 6.8
0.3	103 ± 0.9				
1.0	100 ± 6.1				
3.0	95 ± 5.2				132 ± 4.2
10.0	95 ± 5.2	140 ± 1.2	155 ± 2.9	175 ± 8.7	168 ± 19.0
33.0	87 ± 4.2	274 ± 12.8	312 ± 3.8	461 ± 14.3	539 ± 71.2
100.0		859 ± 44.9	880 ± 55.1	1080 ± 94.0	1503 ± 34.1
333.0		1047 ± 65.0	1137 ± 46.8	1175 ± 74.6	1550 ± 18.9
1000.0		1159 ± 38.8	1219 ± 39.2	1110 ± 34.9	
Trial Summary	Negative	Positive	Positive	Positive	Positive
Positive Control[2]		372 ± 34.0	1836 ± 102.5	1419 ± 37.9	1834 ± 91.6
Positive Control[3]	481 ± 24.7				

Experiment Number: **611954**

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

G06: Ames Summary Data

Test Compound: **3,3'-Dichlorobenzidine dihydrochloride**

CAS Number: **612-83-9**

Date Report Requested: **09/15/2018**

Time Report Requested: **06:46:08**

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	20 ± 4.6	30 ± 3.4	11 ± 1.5	7 ± 1.2
0.3		27 ± 3.5		
1.0		27 ± 1.9		
3.0	15 ± 0.9	24 ± 4.6		
10.0	19 ± 2.9	33 ± 3.2	8 ± 2.3	9 ± 3.3
33.0	9 ± 2.6	25 ± 5.6	6 ± 0.9	7 ± 1.2
100.0	0 ± 0.0[s]		6 ± 0.6	9 ± 1.8
333.0	0 ± 0.0[s]		4 ± 1.5	8 ± 2.0
1000.0			2 ± 1.9[s]	2 ± 1.2[s]
Trial Summary	Negative	Negative	Negative	Negative
Positive Control[3]	358 ± 42.7	472 ± 33.9		
Positive Control[4]			157 ± 14.1	496 ± 4.9

Experiment Number: **611954**

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

G06: Ames Summary Data

Test Compound: **3,3'-Dichlorobenzidine dihydrochloride**

CAS Number: **612-83-9**

Date Report Requested: **09/15/2018**

Time Report Requested: **06:46:08**

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	3 ± 0.7	8 ± 2.6	5 ± 1.8	7 ± 0.6	6 ± 1.8
0.3		6 ± 0.6			
1.0		7 ± 1.0			
3.0	2 ± 0.3	3 ± 0.3			
10.0	2 ± 0.3	5 ± 0.7	13 ± 2.3	17 ± 2.6	23 ± 1.3
33.0	7 ± 1.2	5 ± 1.8	53 ± 0.3	28 ± 6.4	97 ± 18.1
100.0	0 ± 0.0[s]		97 ± 7.0	80 ± 6.4	185 ± 17.2
333.0	0 ± 0.0[s]		164 ± 26.8	110 ± 11.6	262 ± 15.0
1000.0			231 ± 22.2[s]	146 ± 1.7	263 ± 24.0
Trial Summary	Negative	Negative	Positive	Positive	Positive
Positive Control[4]			152 ± 16.4	251 ± 20.2	320 ± 28.6
Positive Control[5]	177 ± 9.3	283 ± 42.9			

Experiment Number: **611954**

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

G06: Ames Summary Data

Test Compound: **3,3'-Dichlorobenzidine dihydrochloride**

CAS Number: **612-83-9**

Date Report Requested: **09/15/2018**

Time Report Requested: **06:46:08**

Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	7 ± 1.0
0.3	
1.0	
3.0	12 ± 2.6
10.0	20 ± 2.1
33.0	61 ± 5.8
100.0	181 ± 22.7
333.0	236 ± 7.0
1000.0	
Trial Summary	Positive
Positive Control[4]	268 ± 14.4
Positive Control[5]	

Experiment Number: **611954**

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

G06: Ames Summary Data

Test Compound: **3,3'-Dichlorobenzidine dihydrochloride**

CAS Number: **612-83-9**

Date Report Requested: **09/15/2018**

Time Report Requested: **06:46:08**

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control[1]	17 ± 1.5	21 ± 3.1	26 ± 3.7	28 ± 5.3	26 ± 2.9
0.3		25 ± 4.5		31 ± 0.7	
1.0		28 ± 4.4		53 ± 1.9	
3.0	26 ± 5.0	37 ± 2.5		215 ± 4.2	
10.0	60 ± 7.4	64 ± 4.9	789 ± 36.9	741 ± 63.9	1183 ± 202.3
33.0	119 ± 8.0	152 ± 11.5	1189 ± 128.4	1710 ± 68.0	1423 ± 122.1
100.0	79 ± 9.7[s]		1068 ± 88.1		1173 ± 77.7
333.0	66 ± 11.4[s]		918 ± 109.6		1095 ± 86.7
1000.0			860 ± 34.9		1036 ± 57.9
Trial Summary	Positive	Positive	Positive	Positive	Positive
Positive Control[2]			342 ± 1.0	1522 ± 82.5	1244 ± 65.3
Positive Control[6]	510 ± 4.0	378 ± 11.6			

Experiment Number: **611954**

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

G06: Ames Summary Data

Test Compound: **3,3'-Dichlorobenzidine dihydrochloride**

CAS Number: **612-83-9**

Date Report Requested: **09/15/2018**

Time Report Requested: **06:46:08**

Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control[1]	38 ± 2.7
0.3	51 ± 6.8
1.0	105 ± 6.0
3.0	409 ± 14.5
10.0	1344 ± 90.9
33.0	1925 ± 131.7
100.0	
333.0	
1000.0	
Trial Summary	Positive
Positive Control[2]	1551 ± 1.5
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: 1.0 ug/Plate Sodium Azide
4: 2.5 ug/Plate 2-Aminoanthracene
5: 50.0 ug/Plate 9-Aminoacridine
6: 5.0 ug/Plate 4-Nitro-O-Phenylenediamine
s: Slight Toxicity

** END OF REPORT **