NTP Study Number:	353732
Study Result:	Positive

Experiment Number: **353732**

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

G06: Ames Summary Data

Test Compound: **Cupferron**

CAS Number: **135-20-6**

Date Report Requested: **09/13/2018**

Time Report Requested: **15:53:42**

Strain: TA100

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control[1]	115 ± 1.5	128 ± 12.8	138 ± 9.3
10.0	116 ± 2.8	153 ± 10.1	118 ± 15.6
33.0	123 ± 8.1	159 ± 7.9	128 ± 9.6
100.0	118 ± 9.7	130 ± 3.5	112 ± 5.3
333.0	102 ± 5.9	132 ± 3.5	85 ± 4.0
666.0	15 ± 8.7	54 ± 12.3	53 ± 10.5
Trial Summary	Negative	Negative	Negative
Positive Control[2]			399 ± 4.9
Positive Control[3]	319 ± 10.5		
Positive Control[4]		447 ± 17.5	

Experiment Number: **353732**

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

G06: Ames Summary Data

Test Compound: **Cupferron**

CAS Number: **135-20-6**

Date Report Requested: **09/13/2018**

Time Report Requested: **15:53:42**

Strain: TA1535

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control[1]	12 ± 0.9	15 ± 4.0	10 ± 1.2
10.0	16 ± 0.3	13 ± 2.9	9 ± 0.3
33.0	14 ± 0.9	13 ± 2.4	10 ± 2.5
100.0	14 ± 0.6	12 ± 2.3	13 ± 3.5
333.0	10 ± 1.8	12 ± 3.8	11 ± 2.3
666.0	1 ± 0.3	7 ± 1.3	10 ± 1.7
Trial Summary	Negative	Negative	Negative
Positive Control[3]	240 ± 18.1		
Positive Control[4]			202 ± 1.0
Positive Control[5]		104 ± 3.4	

Experiment Number: **353732**

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

G06: Ames Summary Data

Test Compound: **Cupferron**

CAS Number: **135-20-6**

Date Report Requested: **09/13/2018**

Time Report Requested: **15:53:42**

Strain: TA1538

Dose (ug/Plate)	Without S9	Without S9	With 5% Rat S9	With 5% Rat S9	With 10% Rat S9
Vehicle Control[1]	15 ± 3.1	12 ± 1.2	25 ± 0.0	23 ± 1.5	26 ± 3.5
10.0	18 ± 3.8	17 ± 1.0		28 ± 4.2	
33.0	23 ± 2.1	22 ± 2.8	35 ± 7.4	36 ± 1.8	30 ± 5.9
100.0	40 ± 3.8	41 ± 1.0	47 ± 3.2	49 ± 2.4	33 ± 3.0
166.0			48 ± 1.3	61 ± 0.9	37 ± 3.4
333.0	53 ± 7.9	61 ± 3.8	71 ± 7.3	61 ± 9.2	62 ± 2.4
666.0	21 ± 6.0[s]	50 ± 13.6	43 ± 7.5[s]		47 ± 5.2[s]
Trial Summary	Positive	Positive	Positive	Positive	Equivocal
Positive Control[6]					
Positive Control[2]			496 ± 32.1	620 ± 25.1	227 ± 19.4
Positive Control[7]	654 ± 2.3	747 ± 42.8			

Experiment Number: **353732**

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

G06: Ames Summary Data

Test Compound: **Cupferron**

CAS Number: **135-20-6**

Date Report Requested: **09/13/2018**

Time Report Requested: **15:53:42**

Strain: TA1538

Dose (ug/Plate)	With 30% Rat S9	With 5% Hamster S9	With 5% Hamster S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	31 ± 2.3	30 ± 1.2	23 ± 0.9	29 ± 1.5	19 ± 0.6
10.0			25 ± 1.9		
33.0	28 ± 5.2	47 ± 6.5	23 ± 3.2	41 ± 1.3	25 ± 0.9
100.0	31 ± 2.7	59 ± 1.7	38 ± 0.7	51 ± 12.7	29 ± 2.1
166.0	30 ± 1.9	68 ± 7.5	53 ± 6.4	56 ± 5.2	33 ± 2.3
333.0	55 ± 5.5	95 ± 8.5	69 ± 8.3	75 ± 7.7	72 ± 7.9
666.0	43 ± 6.0	67 ± 6.8		57 ± 11.3	65 ± 10.7
Trial Summary	Negative	Positive	Positive	Positive	Positive
Positive Control[6]		554 ± 39.0	858 ± 81.0	273 ± 26.1	320 ± 31.4
Positive Control[2]	154 ± 3.8				
Positive Control[7]					

Experiment Number: **353732**

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

G06: Ames Summary Data

Test Compound: **Cupferron**

CAS Number: **135-20-6**

Date Report Requested: **09/13/2018**

Time Report Requested: **15:53:42**

Strain: TA97

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control[1]	143 ± 9.9	162 ± 15.9	133 ± 9.3
10.0	154 ± 5.8	169 ± 9.7	128 ± 5.0
33.0	144 ± 5.1	180 ± 8.6	149 ± 7.0
100.0	163 ± 1.5	187 ± 8.8	151 ± 7.9
333.0	203 ± 16.0[s]	149 ± 13.7	136 ± 3.0
666.0	0 ± 0.0[s]	138 ± 8.0	0 ± 0.0[s]
Trial Summary	Negative	Negative	Negative
Positive Control[2]			357 ± 26.5
Positive Control[4]		380 ± 14.1	
Positive Control[8]	282 ± 36.2		

Experiment Number: **353732**

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

G06: Ames Summary Data

Test Compound: **Cupferron**

CAS Number: **135-20-6**

Date Report Requested: **09/13/2018**

Time Report Requested: **15:53:42**

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 5% Rat S9	With 5% Rat S9	With 10% Rat S9
Vehicle Control[1]	18 ± 1.5	28 ± 3.5	33 ± 2.4	26 ± 0.6	33 ± 1.9
10.0	20 ± 2.1	31 ± 0.9	38 ± 7.6		43 ± 4.4
33.0	24 ± 1.3	28 ± 2.7	47 ± 1.9	29 ± 4.3	42 ± 3.8
100.0	30 ± 2.2	26 ± 3.3	41 ± 2.3	28 ± 1.2	45 ± 4.0
166.0				39 ± 1.2	
333.0	36 ± 8.8	39 ± 3.1	55 ± 2.9	56 ± 8.5	47 ± 5.3
666.0	25 ± 5.2	28 ± 3.2	75 ± 15.2	36 ± 2.7	38 ± 11.3
Trial Summary	Equivocal	Negative	Weakly Positive	Equivocal	Negative
Positive Control[6]					
Positive Control[2]			599 ± 43.9	603 ± 46.0	398 ± 11.3
Positive Control[7]	380 ± 5.6	470 ± 7.9			

Experiment Number: **353732**

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

G06: Ames Summary Data

Test Compound: **Cupferron**

CAS Number: **135-20-6**

Date Report Requested: **09/13/2018**

Time Report Requested: **15:53:42**

Strain: TA98

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 5% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control[1]	35 ± 2.0	39 ± 5.1	34 ± 3.4	39 ± 3.8	28 ± 1.5
10.0	35 ± 2.3	36 ± 2.2	39 ± 1.7	42 ± 4.7	
33.0	36 ± 4.8	37 ± 4.4	45 ± 4.2	36 ± 3.0	28 ± 4.6
100.0	34 ± 3.2	32 ± 3.8	47 ± 4.2	47 ± 9.0	37 ± 5.4
166.0					35 ± 1.8
333.0	48 ± 1.9	42 ± 3.8	75 ± 1.5	53 ± 5.8	39 ± 1.9
666.0	37 ± 3.3	41 ± 12.5	40 ± 8.1	76 ± 25.0	40 ± 8.1
Trial Summary	Negative	Negative	Equivocal	Equivocal	Negative
Positive Control[6]			1114 ± 90.9	769 ± 66.2	763 ± 48.2
Positive Control[2]	83 ± 7.3	129 ± 11.2			
Positive Control[7]					

Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	22 ± 2.3	41 ± 1.3
10.0	23 ± 4.6	34 ± 4.5
33.0	26 ± 3.5	43 ± 8.5
100.0	36 ± 3.7	37 ± 6.6
166.0		
333.0	47 ± 4.7	40 ± 2.4
666.0	36 ± 4.7	41 ± 5.9
Trial Summary	Equivocal	Negative
Positive Control[6]		
Positive Control[2]	147 ± 9.3	304 ± 5.3
Positive Control[7]		

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: 5.0 ug/Plate 2-Aminoanthracene
6: 0.5 ug/Plate 2-Aminoanthracene
7: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
8: 50.0 ug/Plate 9-Aminoacridine
s: Slight Toxicity

** END OF REPORT **