Experiment Number: **733274**

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

G06: Ames Summary Data

Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

NTP Study Number: 733274

Study Result: Weakly Positive

Experiment Number: **733274**

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

G06: Ames Summary Data

Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control[1]	118 ± 6.6	160 ± 11.3	126 ± 10.5	121 ± 1.8	132 ± 4.2
10.0	103 ± 3.8	147 ± 11.6			
33.0	102 ± 5.0	138 ± 3.3	128 ± 7.1	148 ± 9.2	
100.0	100 ± 3.7	174 ± 3.1	169 ± 7.8	151 ± 3.6	122 ± 4.2
200.0				182 ± 4.5	
251.0					
333.0	126 ± 2.6	173 ± 4.9	188 ± 3.5	206 ± 5.9	170 ± 7.7
500.0					105 ± 3.8
667.0	64 ± 3.2	94 ± 10.8		185 ± 8.5	
750.0					14 ± 2.3[s]
1000.0			142 ± 9.6		0 ± 0.0[s]
2000.0			74 ± 3.2[s]		
Trial Summary	Negative	Negative	Equivocal	Weakly Positive	Equivocal
Positive Control[2]					
Positive Control[3]	440 ± 3.1	570 ± 42.9			
Positive Control[4]			1215 ± 17.1	854 ± 155.7	1582 ± 29.0
Positive Control[5]					
Positive Control[6]					

Experiment Number: **733274**

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CAS Number: **5470-11-1**

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Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9
Vehicle Control[1]	136 ± 12.1	110 ± 3.0	190 ± 4.3	161 ± 3.7	138 ± 5.7
10.0					
33.0	156 ± 6.7	117 ± 6.7	187 ± 11.4	164 ± 4.3	
100.0	162 ± 8.8	130 ± 3.5	191 ± 6.0	125 ± 5.5	143 ± 8.5
200.0				143 ± 9.0	
251.0	193 ± 13.7				
333.0	195 ± 11.0	172 ± 4.9	184 ± 5.9	175 ± 7.0	162 ± 5.5
500.0					143 ± 2.8
667.0	229 ± 13.5			173 ± 12.1	
750.0					21 ± 0.3
1000.0		211 ± 13.3	225 ± 18.1		0 ± 0.0[s]
2000.0		66 ± 3.1[s]	86 ± 3.1[s]		
Trial Summary	Weakly Positive	Weakly Positive	Negative	Negative	Negative
Positive Control[2]					
Positive Control[3]					
Positive Control[4]	650 ± 64.0				
Positive Control[5]					
Positive Control[6]		1536 ± 1.3	673 ± 11.6	1536 ± 16.6	1525 ± 23.7

Experiment Number: **733274**

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CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA100

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	159 ± 3.7	118 ± 7.3	124 ± 2.3	123 ± 5.8	132 ± 4.8
10.0					
33.0	161 ± 4.5		110 ± 4.2	126 ± 7.0	164 ± 4.1
100.0	174 ± 6.2	117 ± 6.4	120 ± 1.3	100 ± 2.6	158 ± 3.5
200.0					
251.0	165 ± 1.7		151 ± 8.4		
333.0	178 ± 6.4	139 ± 3.3	155 ± 0.6	166 ± 4.6	210 ± 3.5
500.0		62 ± 2.3			
667.0	242 ± 20.5		198 ± 6.1		
750.0		0 ± 0.0[s]			
1000.0		0 ± 0.0[s]		104 ± 7.4	130 ± 7.8[s]
2000.0				45 ± 12.3[s]	60 ± 3.2[s]
Trial Summary	Equivocal	Negative	Equivocal	Equivocal	Equivocal
Positive Control[2]		440 ± 12.5	383 ± 16.7		
Positive Control[3]					
Positive Control[4]					
Positive Control[5]				856 ± 40.5	748 ± 11.3
Positive Control[6]	1161 ± 19.9				

Experiment Number: **733274**

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

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Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	132 ± 5.8	176 ± 18.0
10.0		
33.0		141 ± 5.4
100.0	132 ± 1.9	115 ± 7.4
200.0		
251.0		146 ± 9.9
333.0	216 ± 8.0	158 ± 9.5
500.0	201 ± 6.9	
667.0		214 ± 11.9
750.0	91 ± 7.1	
1000.0	20 ± 6.3[s]	
2000.0		
Trial Summary	Equivocal	Negative
Positive Control[2]		
Positive Control[3]		
Positive Control[4]		
Positive Control[5]	578 ± 14.0	503 ± 13.5
Positive Control[6]		

Experiment Number: **733274**

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

G06: Ames Summary Data

Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control[1]	40 ± 1.8	27 ± 2.1	13 ± 1.8	12 ± 1.5	16 ± 1.5
10.0	36 ± 1.0				
33.0	37 ± 2.6	28 ± 3.2	23 ± 3.8	15 ± 1.5	15 ± 3.2
100.0	37 ± 3.6	22 ± 3.6	29 ± 4.7	19 ± 3.0	14 ± 0.6
200.0		17 ± 2.0			
250.0				17 ± 4.1	
251.0			33 ± 3.0		
333.0	23 ± 1.0	11 ± 1.8	31 ± 2.9	17 ± 3.1	25 ± 1.2
667.0	12 ± 1.0[s]	9 ± 2.0[s]	22 ± 2.6	15 ± 2.3	
1000.0					18 ± 2.7[s]
2000.0					15 ± 2.3[s]
Trial Summary	Negative	Negative	Equivocal	Negative	Negative
Positive Control[2]					
Positive Control[3]	272 ± 7.7	257 ± 33.5		302 ± 7.3	
Positive Control[5]					
Positive Control[6]			300 ± 12.6		241 ± 11.5

Experiment Number: **733274**

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

G06: Ames Summary Data

Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA1535

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	13 ± 0.9	15 ± 2.4	15 ± 0.0	12 ± 1.3
10.0				
33.0	12 ± 3.5	16 ± 1.5	14 ± 2.6	17 ± 0.9
100.0	18 ± 1.5	14 ± 1.5	12 ± 0.6	11 ± 0.9
200.0	18 ± 0.9			13 ± 1.5
250.0				
251.0		21 ± 1.0		
333.0	18 ± 1.2	19 ± 2.7	15 ± 0.9	15 ± 0.9
667.0	12 ± 2.6	24 ± 0.9		14 ± 2.3
1000.0			24 ± 2.6	
2000.0			17 ± 1.2[s]	
Trial Summary	Negative	Negative	Negative	Negative
Positive Control[2]		111 ± 6.7		
Positive Control[3]				
Positive Control[5]			105 ± 3.1	130 ± 7.6
Positive Control[6]	71 ± 10.3			

Experiment Number: **733274**

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

G06: Ames Summary Data

Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control[1]	121 ± 5.8	86 ± 7.8	145 ± 6.0	139 ± 19.7	208 ± 7.5
33.0	86 ± 5.2	105 ± 5.8	136 ± 6.2	130 ± 7.5	216 ± 6.0
100.0	86 ± 2.8	82 ± 7.4	136 ± 6.6	138 ± 3.5	207 ± 6.9
200.0	78 ± 1.9			96 ± 4.8	
251.0		64 ± 5.5	159 ± 6.1		197 ± 5.2
333.0	31 ± 6.3	41 ± 4.0[s]	156 ± 4.0	99 ± 11.5	156 ± 1.8
500.0					
667.0	5 ± 1.0[s]	18 ± 1.5[s]	84 ± 2.6[s]	69 ± 4.2	101 ± 11.0
750.0					
1000.0					
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[7]		692 ± 11.7			
Positive Control[4]					646 ± 8.1
Positive Control[6]			1421 ± 8.7		
Positive Control[8]				537 ± 34.9	
Positive Control[9]	437 ± 17.7				
Positive Control[10]					

Experiment Number: **733274**

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

G06: Ames Summary Data

Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control[1]	161 ± 9.4
33.0	183 ± 9.0
100.0	169 ± 7.4
200.0	154 ± 23.8
251.0	
333.0	138 ± 18.2
500.0	
667.0	105 ± 11.1
750.0	
1000.0	
Trial Summary	Negative
Positive Control[7]	
Positive Control[4]	
Positive Control[6]	
Positive Control[8]	898 ± 51.3
Positive Control[9]	
Positive Control[10]	

Experiment Number: **733274**

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

G06: Ames Summary Data

Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control[1]	16 ± 0.6	28 ± 4.3	50 ± 2.7	34 ± 3.3	32 ± 2.6
10.0	21 ± 5.0				
33.0	17 ± 0.9	23 ± 0.0	51 ± 4.6	33 ± 1.9	29 ± 1.5
100.0	23 ± 2.5	24 ± 2.8	49 ± 2.3	32 ± 0.9	26 ± 2.9
251.0		24 ± 0.3	46 ± 5.5		26 ± 0.9
333.0	14 ± 2.0	20 ± 1.7	54 ± 5.9	36 ± 3.2	25 ± 3.2
667.0	11 ± 2.6	21 ± 0.0	55 ± 7.4		29 ± 3.0
1000.0				28 ± 1.3	
2000.0				18 ± 3.5[s]	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control[2]			118 ± 9.5		244 ± 12.5
Positive Control[5]				499 ± 10.4	
Positive Control[11]	337 ± 3.5	582 ± 21.3			

Experiment Number: **733274**

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

G06: Ames Summary Data

Test Compound: **Hydroxylamine hydrochloride**

CAS Number: **5470-11-1**

Date Report Requested: **09/17/2018**

Time Report Requested: **05:02:37**

Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control[1]	31 ± 0.9
10.0	
33.0	41 ± 1.5
100.0	31 ± 2.0
251.0	
333.0	27 ± 7.6[s]
667.0	
1000.0	0 ± 0.0[s]
2000.0	Toxic
Trial Summary	Negative
Positive Control[2]	171 ± 13.5
Positive Control[5]	
Positive Control[11]	

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: Water
2: 0.4 ug/Plate 2-Aminoanthracene
3: 0.5 ug/Plate Sodium Azide
4: 0.75 ug/Plate 2-Aminoanthracene
5: 1.0 ug/Plate 2-Aminoanthracene
6: 2.0 ug/Plate 2-Aminoanthracene
7: 0.05 ug/Plate Solvent
8: 2.5 ug/Plate 2-Aminoanthracene
9: 8.0 ug/Plate 9-Aminoacridine
10: 24.0 ug/Plate 9-Aminoacridine
11: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine
s: Slight Toxicity

** END OF REPORT **