

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate

CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

NTP Study Number:

800201

Study Result:

Negative

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate
CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	108 ± 9.0	92 ± 4.7	115 ± 4.1	106 ± 9.9	97 ± 7.0
100.0	112 ± 6.5	84 ± 3.4	91 ± 3.2	90 ± 6.8	112 ± 6.7
333.0	124 ± 4.2 ^s	80 ± 3.7	80 ± 4.2	83 ± 2.4	95 ± 8.4
1000.0	112 ± 8.7 ^s	77 ± 2.4	90 ± 1.5	91 ± 8.7	106 ± 1.9
3333.0	112 ± 9.7 ^s	70 ± 5.0	85 ± 2.6 ^s	77 ± 6.0 ^s	93 ± 3.2 ^s
10000.0	95 ± 8.5 ^s	68 ± 2.3 ^s	74 ± 6.1 ^s	66 ± 2.8 ^s	77 ± 6.4 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					378 ± 14.7
Positive Control ³	473 ± 9.6	293 ± 17.3			
Positive Control ⁴			862 ± 33.7		
Positive Control ⁵					
Positive Control ⁶				517 ± 24.1	

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate

CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	99 ± 1.9
100.0	84 ± 11.0
333.0	89 ± 5.1
1000.0	92 ± 1.5
3333.0	87 ± 3.9 ^s
10000.0	61 ± 3.0 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	260 ± 10.9
Positive Control ⁶	

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate

CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	32 ± 2.1	7 ± 1.2	11 ± 1.3	4 ± 0.9	7 ± 1.7
100.0	33 ± 1.5	7 ± 2.2	10 ± 1.8	6 ± 1.0	13 ± 0.9
333.0	22 ± 3.5	5 ± 0.9	9 ± 0.3	6 ± 0.6	8 ± 0.7
1000.0	22 ± 1.2	6 ± 0.9	8 ± 1.2	7 ± 0.6	11 ± 1.2
3333.0	16 ± 4.4 ^s	6 ± 0.3	9 ± 1.2 ^s	7 ± 2.2 ^s	7 ± 1.9 ^s
10000.0	16 ± 3.2 ^s	2 ± 0.6 ^s	6 ± 1.0 ^s	4 ± 0.9 ^s	5 ± 1.3 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					54 ± 6.7
Positive Control ³	284 ± 13.0	123 ± 15.9			
Positive Control ⁵					
Positive Control ⁷				83 ± 8.9	
Positive Control ⁶			196 ± 2.7		

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate

CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	5 ± 1.2
100.0	6 ± 1.9
333.0	4 ± 0.7
1000.0	5 ± 1.7
3333.0	6 ± 0.6 ^S
10000.0	2 ± 1.2 ^S
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	58 ± 4.9
Positive Control ⁷	
Positive Control ⁶	

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate
CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	113 ± 12.1	75 ± 2.7	160 ± 5.2	138 ± 5.7	131 ± 10.4
100.0	123 ± 4.6	72 ± 3.6	122 ± 3.5	112 ± 3.9	160 ± 10.7
333.0	111 ± 4.9	83 ± 2.0	118 ± 3.5	99 ± 4.4	125 ± 6.0
1000.0	125 ± 6.5 ^s	84 ± 7.9	133 ± 3.6	96 ± 8.7	164 ± 2.9
3333.0	135 ± 5.9 ^s	77 ± 5.0 ^s	164 ± 7.6 ^s	108 ± 2.3 ^s	167 ± 5.8 ^s
10000.0	123 ± 12.7 ^s	80 ± 9.3 ^s	115 ± 7.7 ^s	97 ± 7.7 ^s	110 ± 5.2 ^s
Trial Summary	Negative	Negative	Negative	Negative	Equivocal
Positive Control ²					295 ± 7.6
Positive Control ⁶			1313 ± 21.1	411 ± 6.6	
Positive Control ⁸	405 ± 10.5	595 ± 27.6			

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate
CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	128 ± 5.2
100.0	98 ± 6.6
333.0	100 ± 4.9
1000.0	110 ± 7.5
3333.0	93 ± 6.4
10000.0	77 ± 4.7 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ⁶	542 ± 19.7
Positive Control ⁸	

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate
CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	18 ± 2.2	12 ± 1.5	25 ± 0.9	18 ± 3.7	28 ± 1.0
100.0	18 ± 2.7	10 ± 1.2	21 ± 2.2	17 ± 1.5	21 ± 2.2
333.0	12 ± 1.2	9 ± 1.2	23 ± 4.7	16 ± 3.6	24 ± 1.2
1000.0	15 ± 2.3	9 ± 1.0	23 ± 3.5	16 ± 2.3	21 ± 4.7
3333.0	13 ± 2.3	14 ± 2.4	19 ± 1.3 ^s	15 ± 0.9 ^s	14 ± 2.3
10000.0	20 ± 1.9 ^s	9 ± 1.8 ^s	19 ± 3.5 ^s	6 ± 1.5 ^s	14 ± 1.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁹					148 ± 10.4
Positive Control ²			251 ± 21.5		
Positive Control ¹⁰	149 ± 1.9	234 ± 12.0			
Positive Control ⁵				192 ± 10.0	

Experiment Number: 800201

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Manganese sulfate monohydrate

CAS Number: 10034-96-5

Date Report Requested: 09/15/2018

Time Report Requested: 08:48:31

Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	18 ± 1.5
100.0	10 ± 2.4
333.0	12 ± 2.3
1000.0	16 ± 1.5
3333.0	12 ± 2.0
10000.0	8 ± 2.0 ^s
Trial Summary	Negative
Positive Control ⁹	
Positive Control ²	73 ± 8.1
Positive Control ¹⁰	
Positive Control ⁵	

Experiment Number: 800201

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

G06: Ames Summary Data

Test Compound: **Manganese sulfate monohydrate**

CAS Number: **10034-96-5**

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

Time Report Requested: **08:48:31**

LEGEND

Values given as Mean or Mean \pm 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: 1.5 ug/Plate 2-Aminoanthracene

8: 3.5 ug/Plate 9-Aminoacridine

9: 0.2 ug/Plate 2-Aminoanthracene

10: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**** END OF REPORT ****