

Experiment Number: 214507

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

CAS Number: **298-59-9**

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

Time Report Requested: **15:29:04**

NTP Study Number:

214507

Study Result:

Negative

Experiment Number: 214507

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/14/2018

Time Report Requested: 15:29:04

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	114 ± 5.8	87 ± 7.5	107 ± 13.4	96 ± 5.2	94 ± 3.7
100.0	113 ± 6.0	90 ± 3.2	108 ± 5.0	90 ± 7.9	87 ± 9.0
333.0	102 ± 5.9	85 ± 10.0	105 ± 2.0	87 ± 7.9	104 ± 9.0
1000.0	111 ± 4.9	82 ± 7.0	108 ± 5.5	86 ± 8.0	89 ± 2.6
3333.0	104 ± 6.4	105 ± 3.2	103 ± 3.8	95 ± 7.8	91 ± 5.5
4000.0	105 ± 8.0 ^s	85 ± 4.3			
5000.0			105 ± 7.3	98 ± 2.2	100 ± 7.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					423 ± 19.7
Positive Control ³	494 ± 29.8	236 ± 8.1			
Positive Control ⁴			818 ± 29.3		
Positive Control ⁵					
Positive Control ⁶				477 ± 1.5	

Experiment Number: 214507

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/14/2018

Time Report Requested: 15:29:04

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	99 ± 12.3
100.0	90 ± 3.3
333.0	79 ± 4.4
1000.0	77 ± 6.4
3333.0	87 ± 0.9
4000.0	
5000.0	81 ± 0.3
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	250 ± 6.1
Positive Control ⁶	

Experiment Number: 214507

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/14/2018

Time Report Requested: 15:29:04

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	25 ± 1.9	13 ± 0.0	7 ± 1.7	9 ± 0.9	14 ± 1.3
100.0	26 ± 5.1	11 ± 3.4	11 ± 1.5	9 ± 0.9	9 ± 0.9
333.0	23 ± 1.2	9 ± 0.6	7 ± 0.3	9 ± 0.9	11 ± 1.2
1000.0	26 ± 5.3	10 ± 3.0	9 ± 1.2	9 ± 1.2	9 ± 1.9
3333.0	30 ± 2.9	7 ± 2.6	10 ± 1.7	9 ± 1.3	7 ± 0.9
4000.0	25 ± 2.4 ^s	10 ± 1.5			
5000.0			11 ± 1.2	7 ± 0.6	10 ± 2.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					52 ± 3.1
Positive Control ³	253 ± 17.5	153 ± 6.4			
Positive Control ⁵					
Positive Control ⁷				78 ± 2.4	
Positive Control ⁸			187 ± 8.4		

Experiment Number: 214507

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

CAS Number: **298-59-9**

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

Time Report Requested: **15:29:04**

Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	9 ± 0.7
100.0	10 ± 3.5
333.0	11 ± 0.7
1000.0	8 ± 0.6
3333.0	6 ± 2.0
4000.0	
5000.0	8 ± 2.6
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	75 ± 3.8
Positive Control ⁷	
Positive Control ⁸	

Experiment Number: 214507

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/14/2018

Time Report Requested: 15:29:04

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	106 ± 4.9	98 ± 2.9	115 ± 3.2	126 ± 12.0	125 ± 4.8
100.0	111 ± 5.2	97 ± 8.5	128 ± 2.9	116 ± 7.0	129 ± 2.9
333.0	95 ± 8.1	95 ± 2.8	114 ± 11.7	126 ± 2.1	122 ± 5.0
1000.0	95 ± 4.2	102 ± 3.8	130 ± 13.3	157 ± 5.6	126 ± 4.0
3333.0	96 ± 1.7	88 ± 4.0	161 ± 6.5	163 ± 5.8	122 ± 9.4
4000.0	95 ± 4.7	83 ± 1.7 ^s			
5000.0			124 ± 2.7	128 ± 4.6	131 ± 7.2
Trial Summary	Negative	Negative	Equivocal	Equivocal	Negative
Positive Control ²					228 ± 13.8
Positive Control ⁶			1375 ± 54.2	420 ± 10.4	
Positive Control ⁹	333 ± 8.5	217 ± 17.1			

Experiment Number: 214507

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

CAS Number: 298-59-9

Date Report Requested: 09/14/2018

Time Report Requested: 15:29:04

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	130 ± 2.7
100.0	122 ± 5.5
333.0	122 ± 2.5
1000.0	130 ± 10.3
3333.0	126 ± 11.8
4000.0	
5000.0	158 ± 3.0
Trial Summary	Negative
Positive Control ²	
Positive Control ⁶	416 ± 21.4
Positive Control ⁹	

Experiment Number: 214507

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/14/2018

Time Report Requested: 15:29:04

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 ± 3.5	19 ± 2.7	28 ± 0.6	34 ± 1.8	24 ± 3.5
100.0	16 ± 2.7	23 ± 1.3	34 ± 3.3	43 ± 3.0	22 ± 1.9
333.0	11 ± 0.9	27 ± 1.3	27 ± 2.0	35 ± 6.7	30 ± 2.6
1000.0	13 ± 1.5	25 ± 2.8	23 ± 1.5	36 ± 1.2	25 ± 3.9
3333.0	18 ± 0.7	19 ± 1.0	27 ± 2.1	40 ± 6.4	27 ± 3.7
4000.0	20 ± 1.2	28 ± 2.3			
5000.0			32 ± 4.0	32 ± 2.5	28 ± 4.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			280 ± 4.1		156 ± 8.6
Positive Control ¹⁰	159 ± 7.9	244 ± 5.8			
Positive Control ⁵				116 ± 6.1	

Experiment Number: 214507

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

CAS Number: 298-59-9

Date Report Requested: 09/14/2018

Time Report Requested: 15:29:04

Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	31 ± 2.7
100.0	37 ± 1.2
333.0	33 ± 4.6
1000.0	32 ± 1.7
3333.0	38 ± 2.6
4000.0	
5000.0	33 ± 4.4
Trial Summary	Negative
Positive Control ²	74 ± 1.3
Positive Control ¹⁰	
Positive Control ⁵	

Experiment Number: 214507

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

CAS Number: 298-59-9

Date Report Requested: 09/14/2018

Time Report Requested: 15:29:04

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: 2.0 ug/Plate Sodium Azide

9: 3.5 ug/Plate 9-Aminoacridine

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

s: Slight Toxicity

**** END OF REPORT ****