

Experiment Number: 501412

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

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

Date Report Requested: **09/12/2018**

Time Report Requested: **05:15:42**

NTP Study Number:

501412

Study Result:

Negative

Experiment Number: 501412

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/12/2018

Time Report Requested: 05:15:42

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	126 ± 1.0	122 ± 3.6	142 ± 3.8	132 ± 8.2	117 ± 4.7
100.0	115 ± 4.8	150 ± 1.5	149 ± 5.8	164 ± 9.4	140 ± 3.5
333.0	121 ± 5.6	144 ± 6.9	136 ± 14.1	169 ± 15.4	136 ± 6.4
1000.0	127 ± 8.5	150 ± 7.8	149 ± 6.4	163 ± 4.4	126 ± 5.8
3333.0	142 ± 5.7	167 ± 7.1	156 ± 2.7	181 ± 2.0	135 ± 5.4
10000.0	120 ± 7.5	147 ± 8.1	160 ± 7.2	170 ± 15.6	134 ± 3.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²	493 ± 24.8	447 ± 7.2			
Positive Control ³			1082 ± 50.9	930 ± 108.2	2193 ± 40.6

Experiment Number: 501412

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

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

Date Report Requested: **09/12/2018**

Time Report Requested: **05:15:42**

Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	124 ± 3.5
100.0	156 ± 10.7
333.0	167 ± 11.7
1000.0	139 ± 14.2
3333.0	167 ± 4.0
10000.0	162 ± 22.7
Trial Summary	Negative
Positive Control ²	
Positive Control ³	1577 ± 17.7

Experiment Number: 501412

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/12/2018

Time Report Requested: 05:15:42

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	32 ± 3.0	23 ± 3.1	10 ± 2.7	6 ± 0.9	7 ± 0.6
100.0	34 ± 6.5	22 ± 5.0	12 ± 0.3	12 ± 3.2	15 ± 3.8
333.0	38 ± 1.2	25 ± 2.4	12 ± 2.0	8 ± 1.3	12 ± 2.0
1000.0	33 ± 6.2	28 ± 5.0	10 ± 2.5	8 ± 0.9	16 ± 1.7
3333.0	40 ± 1.9	29 ± 3.5	11 ± 1.5	8 ± 0.6	8 ± 2.2
10000.0	41 ± 4.3	19 ± 3.7	12 ± 2.4	8 ± 0.9	11 ± 1.2
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²	531 ± 11.7	385 ± 7.1			
Positive Control ⁴			193 ± 14.4	163 ± 6.6	426 ± 8.5

Experiment Number: 501412

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

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

Date Report Requested: **09/12/2018**

Time Report Requested: **05:15:42**

Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	8 ± 2.1
100.0	7 ± 0.9
333.0	8 ± 1.3
1000.0	8 ± 2.5
3333.0	6 ± 0.7
10000.0	5 ± 1.2
Trial Summary	Negative
Positive Control ²	
Positive Control ⁴	376 ± 36.1

Experiment Number: 501412

Test Type: Genetic Toxicology - Bacterial
Mutagenicity**G06: Ames Summary Data**

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/12/2018

Time Report Requested: 05:15:42

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	6 ± 1.5	5 ± 0.7	8 ± 2.0	7 ± 2.5	14 ± 0.3
100.0	7 ± 0.3	5 ± 0.3	12 ± 1.7	6 ± 1.5	8 ± 0.7
333.0	7 ± 1.3	4 ± 1.2	10 ± 1.3	7 ± 1.2	8 ± 0.6
1000.0	6 ± 1.3	6 ± 1.5	10 ± 1.2	10 ± 2.2	7 ± 3.2
3333.0	3 ± 0.6	5 ± 1.2	11 ± 2.8	9 ± 2.3	10 ± 2.5
10000.0	11 ± 1.2	6 ± 0.7	11 ± 1.8	4 ± 1.5	13 ± 1.9
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴			216 ± 23.7	185 ± 10.4	324 ± 13.2
Positive Control ⁵	143 ± 22.8	135 ± 21.4			

Experiment Number: 501412

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

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

Date Report Requested: **09/12/2018**

Time Report Requested: **05:15:42**

Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	7 ± 1.5
100.0	8 ± 2.9
333.0	8 ± 3.0
1000.0	7 ± 2.3
3333.0	6 ± 0.9
10000.0	5 ± 1.0
Trial Summary	Negative
Positive Control ⁴	129 ± 0.6
Positive Control ⁵	

Experiment Number: 501412

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Methylphenidate hydrochloride

CAS Number: 298-59-9

Date Report Requested: 09/12/2018

Time Report Requested: 05:15:42

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	21 ± 1.5	17 ± 1.7	28 ± 4.3	26 ± 0.9	34 ± 1.0
100.0	24 ± 2.7	22 ± 4.4	37 ± 3.4	30 ± 1.2	36 ± 2.6
333.0	19 ± 1.2	17 ± 0.3	29 ± 2.0	33 ± 2.6	43 ± 2.6
1000.0	25 ± 1.0	16 ± 1.0	37 ± 2.8	26 ± 3.5	35 ± 4.0
3333.0	24 ± 3.5	18 ± 2.2	39 ± 1.7	30 ± 5.2	41 ± 3.4
10000.0	25 ± 3.5	16 ± 1.2	36 ± 3.5	29 ± 6.2	43 ± 2.0
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³			983 ± 21.0	727 ± 31.3	1772 ± 33.7
Positive Control ⁶	737 ± 15.2	878 ± 45.2			

Experiment Number: 501412

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

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

Date Report Requested: **09/12/2018**

Time Report Requested: **05:15:42**

Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	31 ± 3.8
100.0	29 ± 4.4
333.0	33 ± 4.7
1000.0	33 ± 5.2
3333.0	28 ± 1.5
10000.0	33 ± 3.0
Trial Summary	Negative
Positive Control ³	1285 ± 87.0
Positive Control ⁶	

Experiment Number: 501412

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

G06: Ames Summary Data

Test Compound: **Methylphenidate hydrochloride**

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

Date Report Requested: **09/12/2018**

Time Report Requested: **05:15:42**

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: 1.0 ug/Plate Sodium Azide

3: 1.0 ug/Plate 2-Aminoanthracene

4: 2.5 ug/Plate 2-Aminoanthracene

5: 50.0 ug/Plate 9-Aminoacridine

6: 5.0 ug/Plate 4-Nitro-O-Phenylenediamine

**** END OF REPORT ****