

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

NTP Study Number:

218914

Study Result:

Negative

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	144 ± 18.1	139 ± 5.8	99 ± 9.4	124 ± 8.4	98 ± 6.4
33.0	114 ± 13.4	143 ± 5.8	84 ± 2.0	141 ± 4.0	87 ± 5.5
100.0	114 ± 10.0	133 ± 8.5	98 ± 5.4	131 ± 2.5	85 ± 1.7
333.0	105 ± 7.8	123 ± 8.8	86 ± 6.5	133 ± 3.5	87 ± 3.7
1000.0	93 ± 4.6 ^s	92 ± 4.0 ^s	91 ± 3.6	129 ± 1.7	85 ± 3.8 ^s
3333.0	40 ± 5.5 ^s	Toxic	63 ± 5.5 ^s	50 ± 7.8 ^s	67 ± 4.6 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					1023 ± 50.0
Positive Control ³			1401 ± 34.6	1034 ± 15.2	
Positive Control ⁴	1525 ± 28.8	1824 ± 63.0			

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	134 ± 14.8
33.0	120 ± 4.7
100.0	128 ± 1.5
333.0	119 ± 9.3
1000.0	91 ± 2.3
3333.0	54 ± 8.9 ^s
Trial Summary	Negative
Positive Control ²	1131 ± 46.0
Positive Control ³	
Positive Control ⁴	

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	29 ± 4.7	24 ± 0.6	13 ± 4.4	15 ± 4.1	8 ± 1.5
33.0	28 ± 6.4	31 ± 0.9	11 ± 1.8	14 ± 3.2	10 ± 3.5
100.0	25 ± 3.5	30 ± 0.3	10 ± 1.7	16 ± 0.6	9 ± 1.9
333.0	27 ± 3.3	32 ± 2.4	10 ± 2.6	13 ± 2.6	14 ± 2.2
1000.0	28 ± 0.6	27 ± 3.8	10 ± 0.9	15 ± 1.7	12 ± 2.3
3333.0	9 ± 0.9 ^s	1 ± 0.6 ^s	9 ± 1.7 ^s	7 ± 0.9 ^s	7 ± 2.4 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					161 ± 3.6
Positive Control ³			143 ± 8.9	57 ± 2.7	
Positive Control ⁴	1227 ± 18.7	1138 ± 29.4			

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	12 ± 1.5
33.0	15 ± 2.6
100.0	16 ± 3.8
333.0	15 ± 2.7
1000.0	7 ± 2.0
3333.0	6 ± 0.6 ^s
Trial Summary	Negative
Positive Control ²	184 ± 4.7
Positive Control ³	
Positive Control ⁴	

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	7 ± 1.5	6 ± 1.0	9 ± 2.2	5 ± 0.7	8 ± 1.5
33.0	8 ± 1.2	5 ± 0.6	9 ± 2.9	8 ± 0.6	5 ± 0.9
100.0	6 ± 2.0	6 ± 0.3	9 ± 4.0	8 ± 1.5	5 ± 1.0
333.0	7 ± 1.5	4 ± 0.3	7 ± 3.0	7 ± 1.5	5 ± 0.3
1000.0	3 ± 0.9	5 ± 1.5	10 ± 0.6	9 ± 3.0	7 ± 0.7
3333.0	4 ± 1.5 ^s	2 ± 0.7 ^s	4 ± 2.0 ^s	6 ± 0.6 ^s	3 ± 1.5 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					61 ± 1.5
Positive Control ³			145 ± 5.7	128 ± 4.0	
Positive Control ⁵	1312 ± 87.1	351 ± 37.6			

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	8 ± 2.3
33.0	4 ± 1.7
100.0	6 ± 1.2
333.0	7 ± 2.0
1000.0	6 ± 1.5
3333.0	3 ± 1.5
Trial Summary	Negative
Positive Control ²	83 ± 10.7
Positive Control ³	
Positive Control ⁵	

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	15 ± 5.2	11 ± 2.0	31 ± 1.2	30 ± 2.5	30 ± 2.7
33.0	15 ± 4.6	15 ± 1.3	33 ± 2.3	30 ± 3.5	25 ± 2.0
100.0	13 ± 2.4	15 ± 4.5	31 ± 0.9	31 ± 2.3	26 ± 3.5
333.0	17 ± 2.0	16 ± 2.5	23 ± 0.3	29 ± 4.9	30 ± 2.0
1000.0	9 ± 2.8	13 ± 1.7	27 ± 0.9	28 ± 3.8	26 ± 4.6
3333.0	9 ± 1.0 ^s	15 ± 1.5 ^s	20 ± 2.9 ^s	16 ± 2.3 ^s	18 ± 2.0 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					963 ± 33.9
Positive Control ³			1272 ± 59.1	565 ± 29.4	
Positive Control ⁶	1067 ± 26.5	1400 ± 13.7			

Experiment Number: 218914

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Phenformin hydrochloride

CAS Number: 834-28-6

Date Report Requested: 09/14/2018

Time Report Requested: 21:16:28

Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	29 ± 4.3
33.0	28 ± 4.7
100.0	25 ± 2.5
333.0	31 ± 1.2
1000.0	28 ± 5.4
3333.0	22 ± 0.6 ^s
Trial Summary	Negative
Positive Control ²	669 ± 28.6
Positive Control ³	
Positive Control ⁶	

Experiment Number: 218914
Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data
Test Compound: Phenformin hydrochloride
CAS Number: 834-28-6

Date Report Requested: 09/14/2018
Time Report Requested: 21:16:28

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: Dimethyl Sulfoxide

2: 0.75 ug/Plate 2-Aminoanthracene

3: 1.5 ug/Plate 2-Aminoanthracene

4: 2.5 ug/Plate Sodium Azide

5: 80.0 ug/Plate 9-Aminoacridine

6: 12.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**** END OF REPORT ****