

Experiment Number: **408062**

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

G06: Ames Summary Data

Test Compound: **Pinane**

CAS Number: **473-55-2**

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

Time Report Requested: **22:44:00**

NTP Study Number:

408062

Study Result:

Negative

Experiment Number: 408062

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Pinane

CAS Number: 473-55-2

Date Report Requested: 09/14/2018

Time Report Requested: 22:44:00

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	96 ± 4.1	109 ± 2.3	121 ± 6.6	135 ± 5.7	113 ± 9.3
1.0	108 ± 1.9	99 ± 10.7			
3.0	111 ± 8.4	100 ± 1.7			
10.0	111 ± 1.5	112 ± 2.9			
33.0	110 ± 7.9	96 ± 11.2			
100.0	85 ± 6.6	109 ± 1.2	109 ± 6.3	127 ± 9.2	117 ± 4.3
333.0			113 ± 6.4	117 ± 3.2	105 ± 7.5
1000.0			111 ± 1.9	98 ± 4.5	108 ± 0.0
3333.0			94 ± 3.5	125 ± 5.5	89 ± 5.8
10000.0			23 ± 2.5 ^s	95 ± 4.3	4 ± 1.0 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					435 ± 8.5
Positive Control ³			329 ± 14.5		
Positive Control ⁴				273 ± 10.0	
Positive Control ⁵	769 ± 25.8	1013 ± 19.8			

Experiment Number: 408062

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Pinane

CAS Number: 473-55-2

Date Report Requested: 09/14/2018

Time Report Requested: 22:44:00

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	126 ± 7.1
1.0	
3.0	
10.0	
33.0	
100.0	119 ± 14.1
333.0	101 ± 7.7
1000.0	110 ± 3.3
3333.0	112 ± 5.0
10000.0	83 ± 7.4
Trial Summary	Negative
Positive Control ²	
Positive Control ³	417 ± 32.1
Positive Control ⁴	
Positive Control ⁵	

Experiment Number: 408062

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Pinane

CAS Number: 473-55-2

Date Report Requested: 09/14/2018

Time Report Requested: 22:44:00

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	9 ± 1.2	8 ± 1.5	11 ± 0.7	13 ± 0.7	7 ± 0.3
1.0	9 ± 0.0	10 ± 1.0			
3.0	14 ± 1.2	10 ± 1.5			
10.0	8 ± 1.5	10 ± 1.5			
33.0	10 ± 0.7	8 ± 0.3			
100.0	9 ± 2.0		10 ± 0.6	12 ± 0.6	9 ± 1.5
333.0			8 ± 1.0	13 ± 2.1	8 ± 0.6
1000.0		9 ± 0.9	10 ± 0.9	14 ± 2.0	8 ± 1.3
3333.0			8 ± 1.5	12 ± 1.2	8 ± 0.3
10000.0			Toxic	10 ± 1.2	4 ± 0.7 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ³					106 ± 2.9
Positive Control ⁴			89 ± 6.1		
Positive Control ⁵	852 ± 28.4	804 ± 49.2			
Positive Control ⁶				101 ± 6.2	

Experiment Number: 408062
Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data
Test Compound: Pinane
CAS Number: 473-55-2

Date Report Requested: 09/14/2018
Time Report Requested: 22:44:00

Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	10 ± 0.7
1.0	
3.0	
10.0	
33.0	
100.0	11 ± 1.7
333.0	13 ± 0.7
1000.0	10 ± 1.5
3333.0	9 ± 0.3
10000.0	11 ± 1.3
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	448 ± 8.2
Positive Control ⁵	
Positive Control ⁶	

Experiment Number: 408062

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Pinane

CAS Number: 473-55-2

Date Report Requested: 09/14/2018

Time Report Requested: 22:44:00

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	112 ± 5.0	109 ± 1.5	125 ± 11.2	174 ± 6.4	112 ± 10.7
1.0	118 ± 8.8	115 ± 11.0			
3.0	117 ± 4.0	113 ± 6.2			
10.0	126 ± 8.9	118 ± 9.0			
33.0	130 ± 8.9	121 ± 3.3			
100.0	110 ± 9.6	90 ± 5.2	128 ± 3.7	169 ± 5.5	133 ± 7.3
333.0			132 ± 3.5	167 ± 3.6	122 ± 2.5
1000.0			132 ± 1.7	183 ± 2.3	115 ± 5.9
3333.0			128 ± 1.2	178 ± 2.3	112 ± 4.6
10000.0			118 ± 3.4 ^s	158 ± 14.7	82 ± 11.1 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					361 ± 17.1
Positive Control ³			293 ± 2.3		
Positive Control ⁷		403 ± 8.9			
Positive Control ⁴				375 ± 8.4	
Positive Control ⁸	441 ± 39.8				

Experiment Number: 408062

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Pinane

CAS Number: 473-55-2

Date Report Requested: 09/14/2018

Time Report Requested: 22:44:00

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	149 ± 10.4
1.0	
3.0	
10.0	
33.0	
100.0	161 ± 2.0
333.0	150 ± 3.8
1000.0	169 ± 11.3
3333.0	158 ± 4.8
10000.0	133 ± 9.6
Trial Summary	Negative
Positive Control ²	
Positive Control ³	493 ± 12.6
Positive Control ⁷	
Positive Control ⁴	
Positive Control ⁸	

Experiment Number: 408062

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Pinane

CAS Number: 473-55-2

Date Report Requested: 09/14/2018

Time Report Requested: 22:44:00

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 ± 1.2	14 ± 0.6	20 ± 1.0	22 ± 1.9	22 ± 2.3
1.0	16 ± 2.0	13 ± 2.1			
3.0	18 ± 1.9	11 ± 1.2			
10.0	14 ± 1.5	16 ± 2.3			
33.0	12 ± 2.0	8 ± 4.6			
100.0	18 ± 1.8	14 ± 1.7	17 ± 1.2	24 ± 3.2	23 ± 2.4
333.0			16 ± 0.9	17 ± 1.2	22 ± 3.8
1000.0			15 ± 1.2	23 ± 3.4	21 ± 5.0
3333.0			17 ± 0.6	21 ± 1.5	17 ± 1.9
10000.0			Toxic	16 ± 4.6	Toxic
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					317 ± 6.2
Positive Control ³			211 ± 22.2		
Positive Control ⁴				243 ± 25.9	
Positive Control ⁹	302 ± 13.0	376 ± 2.3			

Experiment Number: 408062
Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data
Test Compound: Pinane
CAS Number: 473-55-2

Date Report Requested: 09/14/2018
Time Report Requested: 22:44:00

Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	25 ± 0.3
1.0	
3.0	
10.0	
33.0	
100.0	23 ± 2.7
333.0	19 ± 0.7
1000.0	21 ± 1.5
3333.0	16 ± 1.9
10000.0	17 ± 1.5
Trial Summary	Negative
Positive Control ²	
Positive Control ³	260 ± 21.2
Positive Control ⁴	
Positive Control ⁹	

Experiment Number: 408062
Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data
Test Compound: Pinane
CAS Number: 473-55-2

Date Report Requested: 09/14/2018
Time Report Requested: 22:44:00

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: 0.5 ug/Plate 2-Aminoanthracene
- 3: 1.0 ug/Plate 2-Aminoanthracene
- 4: 2.5 ug/Plate 2-Aminoanthracene
- 5: 5.0 ug/Plate Sodium Azide
- 6: 5.0 ug/Plate 2-Aminoanthracene
- 7: 2.5 ug/Plate 9-Aminoacridine
- 8: 50.0 ug/Plate 9-Aminoacridine
- 9: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
- s: Slight Toxicity

**** END OF REPORT ****