

Experiment Number: 264991

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

G06: Ames Summary Data

Test Compound: **Beryllium sulfate tetrahydrate**

CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

NTP Study Number:

264991

Study Result:

Negative

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	86 ± 8.1	84 ± 6.2	102 ± 0.9	97 ± 12.8	90 ± 6.1
100.0	76 ± 4.2	80 ± 5.8	90 ± 7.2	100 ± 2.0	93 ± 5.0
333.0	81 ± 2.6	90 ± 6.4	85 ± 3.6	100 ± 6.2	91 ± 8.0
1000.0	108 ± 12.7 ^s	81 ± 5.2	95 ± 7.2	94 ± 7.6 ^s	97 ± 2.3
3333.0	93 ± 3.1 ^s	83 ± 4.0	95 ± 8.7 ^s	98 ± 3.5 ^s	89 ± 5.5 ^s
6666.0		43 ± 6.2 ^s	54 ± 6.8 ^s		22 ± 21.7 ^s
10000.0	0 ± 0.0 ^s			0 ± 0.0 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					383 ± 24.7
Positive Control ³	290 ± 4.1	254 ± 10.0			
Positive Control ⁴			357 ± 11.0		
Positive Control ⁵					
Positive Control ⁶				300 ± 9.3	

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	103 ± 6.9
100.0	95 ± 8.3
333.0	95 ± 1.5
1000.0	92 ± 4.7 ^s
3333.0	102 ± 6.9 ^s
6666.0	
10000.0	0 ± 0.0 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	301 ± 1.7
Positive Control ⁶	

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	16 ± 2.9	17 ± 4.9	8 ± 1.5	11 ± 1.3	8 ± 0.3
100.0	17 ± 1.9	15 ± 2.3	12 ± 0.9	8 ± 1.9	5 ± 1.5
333.0	15 ± 2.6	16 ± 1.5	6 ± 1.0	6 ± 1.2	6 ± 0.3
1000.0	14 ± 6.5	15 ± 2.0	4 ± 0.3	5 ± 2.0	8 ± 1.5
3333.0	13 ± 1.8	16 ± 2.5	6 ± 0.6	9 ± 0.7	4 ± 1.2
6666.0	6 ± 2.2 ^s	0 ± 0.3 ^s	2 ± 0.7 ^s	12 ± 1.7 ^s	1 ± 0.7 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					47 ± 3.2
Positive Control ³	159 ± 9.5	207 ± 7.0			
Positive Control ⁵					
Positive Control ⁶			137 ± 5.2	96 ± 4.5	

Experiment Number: 264991

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

G06: Ames Summary Data

Test Compound: **Beryllium sulfate tetrahydrate**

CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	12 ± 1.3
100.0	7 ± 1.5
333.0	6 ± 2.8
1000.0	9 ± 0.7
3333.0	4 ± 0.9
6666.0	3 ± 0.9 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	137 ± 17.3
Positive Control ⁶	

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	6 ± 0.9	7 ± 1.5	9 ± 0.6	6 ± 1.2	5 ± 1.3
100.0	6 ± 0.6	7 ± 0.6	8 ± 1.8	7 ± 1.2	7 ± 1.0
333.0	4 ± 0.9	9 ± 3.0	7 ± 0.6	6 ± 0.7	8 ± 1.0
1000.0	3 ± 1.2	7 ± 1.5	8 ± 0.7	8 ± 1.5	9 ± 0.9
3333.0	5 ± 1.2	6 ± 1.2	5 ± 0.9	5 ± 0.0	5 ± 0.9
6666.0	3 ± 1.0 ^s	4 ± 1.5 ^s	4 ± 2.0 ^s	4 ± 1.7 ^s	3 ± 0.7 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴					136 ± 4.7
Positive Control ⁶			123 ± 5.4		
Positive Control ⁷				52 ± 4.4	
Positive Control ⁸	199 ± 6.9	58 ± 0.9			

Experiment Number: 264991

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

G06: Ames Summary Data

Test Compound: **Beryllium sulfate tetrahydrate**

CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA1537

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	5 ± 0.3
100.0	3 ± 1.0
333.0	5 ± 1.2
1000.0	7 ± 2.0
3333.0	4 ± 0.7
6666.0	2 ± 1.3 ^s
Trial Summary	Negative
Positive Control ⁴	
Positive Control ⁶	
Positive Control ⁷	124 ± 11.6
Positive Control ⁸	

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	Without S9	Without S9	Without S9
Vehicle Control ¹	78 ± 1.9	80 ± 5.5	97 ± 8.8	130 ± 3.5	113 ± 4.2
10.0					
33.0					
100.0	72 ± 0.9	84 ± 12.3	173 ± 22.3	155 ± 10.0	107 ± 3.8
333.0	75 ± 5.0	91 ± 1.8	260 ± 25.2 ^P	158 ± 9.0	130 ± 7.6
667.0					
1000.0	91 ± 4.0	106 ± 5.8	384 ± 11.2 ^P	134 ± 4.4	125 ± 7.3
2000.0			339 ± 26.9 ^P		
3333.0	120 ± 7.6	120 ± 2.4	293 ± 16.1 ^P	132 ± 10.5 ^P	123 ± 7.0 ^P
5000.0			198 ± 2.0 ^S		
6666.0	80 ± 0.9 ^S	49 ± 15.5 ^S	128 ± 8.4 ^S		
6667.0				92 ± 5.1 ^S	75 ± 9.9 ^S
Trial Summary	Equivocal	Equivocal	Positive	Negative	Negative
Positive Control ⁴					
Positive Control ⁶					
Positive Control ⁷					
Positive Control ⁹	397 ± 40.7	157 ± 5.8	265 ± 32.8		
Positive Control ¹⁰				111 ± 12.5	485 ± 11.9

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA97

Dose (ug/Plate)	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	110 ± 3.5	107 ± 5.8	155 ± 2.2	155 ± 7.2	130 ± 6.2
10.0	120 ± 6.5				
33.0	136 ± 3.5				
100.0	120 ± 7.1	116 ± 3.8	214 ± 18.2	163 ± 5.9	131 ± 6.4
333.0	127 ± 4.5	109 ± 9.1	409 ± 18.6 ^P	173 ± 4.9	139 ± 3.6
667.0	104 ± 3.6				
1000.0	121 ± 8.0	116 ± 4.0	541 ± 16.4 ^P	179 ± 5.2	136 ± 4.2
2000.0			474 ± 18.6 ^P		
3333.0		134 ± 8.7	372 ± 15.3 ^P	125 ± 2.0 ^P	122 ± 1.5 ^P
5000.0			296 ± 25.8 ^S		
6666.0		105 ± 18.2 ^S	174 ± 25.4 ^S		
6667.0				125 ± 10.6 ^S	90 ± 5.8 ^S
Trial Summary	Negative	Negative	Positive	Negative	Negative
Positive Control ⁴					
Positive Control ⁶		674 ± 20.7	945 ± 35.7	2953 ± 55.0	2129 ± 64.9
Positive Control ⁷					
Positive Control ⁹					
Positive Control ¹⁰	362 ± 5.0				

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA97

Dose (ug/Plate)	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9
Vehicle Control ¹	89 ± 9.0	175 ± 6.9	182 ± 6.4	148 ± 9.2	139 ± 10.9
10.0					
33.0	103 ± 5.9				
100.0	104 ± 1.2	143 ± 3.5	188 ± 7.7	136 ± 6.4	149 ± 7.9
333.0	106 ± 14.2	147 ± 2.3	347 ± 3.0 ^P	134 ± 0.6	130 ± 10.3
667.0					
1000.0	127 ± 6.3 ^P	150 ± 5.8	415 ± 21.2 ^P	128 ± 2.3	135 ± 1.5
2000.0	76 ± 13.0 ^P		337 ± 16.5 ^P		
3333.0		142 ± 8.1	353 ± 6.0 ^P	109 ± 3.8 ^P	120 ± 5.9 ^S
5000.0			283 ± 13.2 ^S		
6666.0		128 ± 20.9 ^S	135 ± 9.1 ^S		
6667.0				89 ± 7.0 ^S	91 ± 5.4 ^S
Trial Summary	Negative	Negative	Positive	Negative	Negative
Positive Control ⁴					
Positive Control ⁶	1312 ± 76.3			1111 ± 36.7	1043 ± 62.6
Positive Control ⁷		397 ± 15.5	361 ± 15.6		
Positive Control ⁹					
Positive Control ¹⁰					

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA97

Dose (ug/Plate)	With 30% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	134 ± 5.0	107 ± 1.2	129 ± 9.5	151 ± 10.0	105 ± 8.2
10.0					
33.0	106 ± 7.9				
100.0	122 ± 5.0	115 ± 7.2	252 ± 24.9	161 ± 1.2	125 ± 5.6
333.0	132 ± 10.5	120 ± 6.4	503 ± 7.3 ^P	149 ± 5.8	138 ± 4.2
667.0					
1000.0	110 ± 4.5 ^P	154 ± 6.2	524 ± 18.9 ^P	130 ± 7.9	154 ± 7.5
2000.0	87 ± 0.3 ^P		522 ± 20.4 ^P		
3333.0		129 ± 7.9	451 ± 22.4 ^P	122 ± 11.7 ^P	115 ± 24.9 ^P
5000.0			385 ± 17.3 ^S		
6666.0		81 ± 3.8 ^S	124 ± 22.7 ^S		
6667.0				100 ± 6.2 ^P	135 ± 0.7 ^S
Trial Summary	Negative	Equivocal	Positive	Negative	Equivocal
Positive Control ⁴		891 ± 28.4	787 ± 31.8	2161 ± 83.4	1033 ± 13.9
Positive Control ⁶	807 ± 47.0				
Positive Control ⁷					
Positive Control ⁹					
Positive Control ¹⁰					

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA97

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	93 ± 7.8	125 ± 2.3	132 ± 11.3	151 ± 1.5	151 ± 6.8
10.0					
33.0	115 ± 4.4				
100.0	86 ± 8.7	128 ± 5.4	136 ± 7.3	213 ± 6.0	133 ± 5.5
333.0	104 ± 2.5	155 ± 9.6	149 ± 8.8	410 ± 6.5 ^P	136 ± 8.3
667.0					
1000.0	122 ± 7.2 ^P	204 ± 10.5	146 ± 5.7	394 ± 16.1 ^P	132 ± 4.9
2000.0	119 ± 2.4 ^P			405 ± 2.1 ^P	
3333.0		158 ± 3.2	128 ± 4.7	396 ± 11.3 ^P	131 ± 8.4 ^P
5000.0				343 ± 7.9 ^S	
6666.0		131 ± 19.8 ^S	112 ± 5.5 ^S	73 ± 28.3 ^S	
6667.0					93 ± 7.3 ^S
Trial Summary	Negative	Equivocal	Negative	Positive	Negative
Positive Control ⁴	1102 ± 67.3				
Positive Control ⁶					779 ± 32.5
Positive Control ⁷		717 ± 4.5	793 ± 23.8	851 ± 60.9	
Positive Control ⁹					
Positive Control ¹⁰					

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control ¹	135 ± 3.6	100 ± 10.6
10.0		
33.0		116 ± 10.7
100.0	147 ± 5.2	118 ± 5.3
333.0	151 ± 5.9	119 ± 11.8
667.0		
1000.0	142 ± 5.0	127 ± 2.7 ^P
2000.0		115 ± 1.2 ^P
3333.0	133 ± 8.7 ^P	
5000.0		
6666.0		
6667.0	139 ± 5.8 ^S	
Trial Summary	Negative	Negative
Positive Control ⁴		
Positive Control ⁶	1276 ± 65.7	1250 ± 54.6
Positive Control ⁷		
Positive Control ⁹		
Positive Control ¹⁰		

Experiment Number: 264991

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	15 ± 2.5	13 ± 1.5	26 ± 3.3	25 ± 0.6	24 ± 1.9
100.0	16 ± 2.0	16 ± 0.9	24 ± 0.3	22 ± 1.9	27 ± 2.8
333.0	12 ± 2.4	19 ± 0.9	26 ± 2.2	22 ± 1.5	24 ± 4.4
1000.0	14 ± 0.7	12 ± 0.9	20 ± 1.0	20 ± 1.5	25 ± 1.2
3333.0	15 ± 1.8	15 ± 2.4	17 ± 1.5	26 ± 5.1 ^s	25 ± 2.0
6666.0		4 ± 0.3 ^s	12 ± 2.6 ^s		8 ± 0.9 ^s
10000.0	0 ± 0.0 ^s			0 ± 0.0 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ¹¹					228 ± 6.2
Positive Control ²			70 ± 3.5		
Positive Control ¹²	196 ± 29.1	121 ± 3.0			
Positive Control ⁵				83 ± 1.2	

Experiment Number: 264991
Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data
Test Compound: Beryllium sulfate tetrahydrate
CAS Number: 7787-56-6

Date Report Requested: 09/11/2018
Time Report Requested: 08:21:03

Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	25 ± 3.4
100.0	29 ± 5.2
333.0	21 ± 2.8
1000.0	22 ± 2.1
3333.0	22 ± 2.1
6666.0	
10000.0	0 ± 0.0 ^s
Trial Summary	Negative
Positive Control ¹¹	
Positive Control ²	96 ± 2.7
Positive Control ¹²	
Positive Control ⁵	

Experiment Number: 264991

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

G06: Ames Summary Data

Test Compound: **Beryllium sulfate tetrahydrate**

CAS Number: 7787-56-6

Date Report Requested: 09/11/2018

Time Report Requested: 08:21:03

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: 2.5 ug/Plate 2-Aminoanthracene

8: 4.0 ug/Plate 9-Aminoacridine

9: 8.0 ug/Plate 9-Aminoacridine

10: 24.0 ug/Plate 9-Aminoacridine

11: 0.2 ug/Plate 2-Aminoanthracene

12: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

p: Precipitate

s: Slight Toxicity

**** END OF REPORT ****