

Experiment Number: 035712

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

G06: Ames Summary Data

Test Compound: **Calcium cyanamide**

CAS Number: **156-62-7**

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

Time Report Requested: **19:37:50**

NTP Study Number:

035712

Study Result:

Equivocal

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	124 ± 11.0	116 ± 7.0	136 ± 9.8	106 ± 8.8	118 ± 3.7
33.3	135 ± 10.1	108 ± 12.1	131 ± 10.4	114 ± 5.8	138 ± 3.5
100.0	117 ± 9.3 ^p	105 ± 3.3 ^p	127 ± 1.8 ^p	110 ± 13.2 ^p	143 ± 1.2 ^p
333.3	110 ± 4.7 ^p	102 ± 7.6 ^p	108 ± 6.0 ^p	107 ± 8.6 ^p	145 ± 5.0 ^p
1000.0	117 ± 4.0 ^p	112 ± 7.5 ^p	116 ± 2.5 ^p	132 ± 4.3 ^p	142 ± 8.1 ^p
3333.3	118 ± 7.4 ^p	127 ± 3.5 ^p	119 ± 5.9 ^p	142 ± 7.5 ^p	132 ± 10.7 ^p
Trial Summary	Negative	Negative	Negative	Equivocal	Equivocal
Positive Control ²			786 ± 35.5	571 ± 39.1	1784 ± 84.0
Positive Control ³	445 ± 4.2	343 ± 9.8			

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Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	113 ± 12.1
33.3	125 ± 5.0
100.0	123 ± 10.4 ^P
333.3	118 ± 15.3 ^P
1000.0	110 ± 5.2 ^P
3333.3	130 ± 6.1 ^P
Trial Summary	Negative
Positive Control ²	1802 ± 54.8
Positive Control ³	

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	13 ± 0.3	13 ± 2.0	13 ± 1.0	6 ± 0.7	10 ± 1.8
33.3	16 ± 5.2	13 ± 0.7	11 ± 1.8	9 ± 3.5	14 ± 2.8
100.0	17 ± 2.6 ^p	18 ± 0.7 ^p	10 ± 1.5 ^p	15 ± 1.2 ^p	21 ± 2.8 ^p
333.3	15 ± 2.8 ^p	16 ± 1.8 ^p	14 ± 1.0 ^p	19 ± 1.8 ^p	25 ± 1.0 ^p
1000.0	15 ± 3.5 ^p	17 ± 3.2 ^p	23 ± 3.8 ^p	11 ± 1.2 ^p	30 ± 1.5 ^p
3333.3	17 ± 1.2 ^p	11 ± 1.0 ^p	17 ± 3.2 ^p	10 ± 1.5 ^p	23 ± 2.0 ^p
Trial Summary	Negative	Negative	Equivocal	Equivocal	Positive
Positive Control ³	395 ± 22.6	370 ± 5.2			
Positive Control ⁴			256 ± 20.8	266 ± 8.7	432 ± 21.2

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Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	7 ± 2.5
33.3	11 ± 0.3
100.0	10 ± 0.7 ^p
333.3	11 ± 1.8 ^p
1000.0	11 ± 2.0 ^p
3333.3	10 ± 1.5 ^p
Trial Summary	Negative
Positive Control ³	
Positive Control ⁴	429 ± 27.5

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Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	4 ± 0.3	4 ± 1.2	5 ± 1.2	6 ± 1.2	9 ± 0.3
33.3	4 ± 0.9	6 ± 2.5	6 ± 1.0	7 ± 0.9	12 ± 0.3
100.0	5 ± 1.2 ^p	4 ± 0.9 ^p	6 ± 0.3 ^p	7 ± 0.3 ^p	10 ± 2.7 ^p
333.3	4 ± 0.3 ^p	5 ± 0.9 ^p	6 ± 1.8 ^p	6 ± 1.2 ^p	10 ± 0.9 ^p
1000.0	9 ± 2.3 ^p	4 ± 0.7 ^p	8 ± 1.2 ^p	5 ± 0.7 ^p	12 ± 1.2 ^p
3333.3	7 ± 1.2 ^p	7 ± 2.0 ^p	8 ± 1.7 ^p	6 ± 0.0 ^p	7 ± 2.4 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁴			111 ± 8.5	142 ± 14.4	510 ± 44.3
Positive Control ⁵	201 ± 58.9	89 ± 5.4			

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Strain: TA1537

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	6 ± 0.3
33.3	8 ± 0.3
100.0	5 ± 1.2 ^P
333.3	6 ± 1.2 ^P
1000.0	5 ± 0.7 ^P
3333.3	6 ± 1.5 ^P
Trial Summary	Negative
Positive Control ⁴	239 ± 33.3
Positive Control ⁵	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Hamster S9
Vehicle Control ¹	20 ± 3.7	20 ± 3.8	35 ± 4.4	31 ± 2.9	31 ± 3.1
33.3	27 ± 6.0	27 ± 4.3	20 ± 0.6	31 ± 1.2	32 ± 6.6
100.0	26 ± 3.8 ^p	26 ± 1.3 ^p	22 ± 3.4 ^p	38 ± 1.2 ^p	43 ± 3.3 ^p
333.3	22 ± 2.2 ^p	24 ± 2.5 ^p	23 ± 2.8 ^p	35 ± 3.5 ^p	37 ± 3.8 ^p
1000.0	26 ± 0.6 ^p	23 ± 2.2 ^p	32 ± 3.0 ^p	37 ± 2.7 ^p	33 ± 1.9 ^p
3333.3	24 ± 1.5 ^p	15 ± 1.5 ^p	27 ± 2.4 ^p	36 ± 2.7 ^p	29 ± 1.2 ^p
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²			399 ± 14.2	448 ± 22.1	1305 ± 62.3
Positive Control ⁶	727 ± 19.7	673 ± 21.1			

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Test Compound: Calcium cyanamide

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Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9
Vehicle Control ¹	30 ± 2.0
33.3	30 ± 1.3
100.0	33 ± 4.4 ^P
333.3	28 ± 3.5 ^P
1000.0	22 ± 2.8 ^P
3333.3	32 ± 2.0 ^P
Trial Summary	Negative
Positive Control ²	1652 ± 43.7
Positive Control ⁶	

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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: 1.0 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate Sodium Azide

4: 2.5 ug/Plate 2-Aminoanthracene

5: 50.0 ug/Plate 9-Aminoacridine

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

p: Precipitate

**** END OF REPORT ****