

Experiment Number: 281351

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

G06: Ames Summary Data

Test Compound: **2-Hydroxy-1,4-naphthoquinone**

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

NTP Study Number:

281351

Study Result:

Positive

Experiment Number: 281351

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Hydroxy-1,4-naphthoquinone

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	118 ± 10.3	119 ± 6.0	143 ± 4.7	116 ± 4.6	76 ± 6.2
10.0	130 ± 8.9	124 ± 8.5	166 ± 22.9	132 ± 5.0	127 ± 19.5
33.0	143 ± 9.3	128 ± 14.7	147 ± 12.8	134 ± 9.2	128 ± 18.5
100.0	125 ± 12.1	103 ± 11.7	148 ± 11.9	143 ± 18.2	125 ± 6.2
166.0					92 ± 6.7
333.0	86 ± 8.5	44 ± 6.1	169 ± 10.4	24 ± 7.7	95 ± 32.4
1000.0	0 ± 0.0 ^s	Toxic	0 ± 0.0 ^s	0 ± 0.0 ^s	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²	369 ± 11.7	357 ± 7.8			
Positive Control ³			412 ± 17.6	398 ± 20.7	744 ± 48.8

Experiment Number: 281351

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Hydroxy-1,4-naphthoquinone

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	131 ± 10.1	138 ± 5.7	110 ± 4.0	110 ± 5.9
10.0	157 ± 9.6	136 ± 5.1	122 ± 10.3	136 ± 3.2
33.0	159 ± 7.4	150 ± 6.7	127 ± 13.3	135 ± 10.9
100.0	161 ± 13.0	129 ± 9.5	114 ± 1.8	115 ± 6.7
166.0	148 ± 3.1			80 ± 12.2
333.0	215 ± 29.6	58 ± 6.7	3 ± 2.7 ^s	24 ± 8.4
1000.0		Toxic	0 ± 0.0 ^s	
Trial Summary	Negative	Negative	Negative	Negative
Positive Control ²				
Positive Control ³	552 ± 14.0	1373 ± 44.0	1301 ± 49.1	842 ± 13.0

Experiment Number: 281351

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Hydroxy-1,4-naphthoquinone

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	31 ± 3.7	17 ± 0.6	29 ± 2.0	11 ± 3.0	5 ± 0.7
10.0	43 ± 0.9	11 ± 3.8	27 ± 4.5	11 ± 3.3	9 ± 6.2
33.0	49 ± 1.9	9 ± 2.6	21 ± 3.8	9 ± 3.5	4 ± 0.9
100.0	27 ± 4.0	5 ± 1.2	16 ± 2.6	10 ± 2.8	3 ± 0.7
166.0					6 ± 1.8
333.0	7 ± 1.2	4 ± 0.9	12 ± 3.3	4 ± 1.2	3 ± 1.2
1000.0	Toxic	Toxic	0 ± 0.0 ^s	Toxic	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²	340 ± 15.0	240 ± 3.2			
Positive Control ⁴			130 ± 3.8	119 ± 14.0	173 ± 31.1

Experiment Number: 281351

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Hydroxy-1,4-naphthoquinone

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

Strain: TA1535

Dose (ug/Plate)	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	13 ± 0.3	15 ± 1.2	8 ± 2.0
10.0	32 ± 6.4	22 ± 3.5	8 ± 4.3
33.0	28 ± 5.8	20 ± 2.6	7 ± 3.2
100.0	23 ± 2.5	15 ± 1.2	2 ± 0.3
166.0			3 ± 0.6
333.0	3 ± 1.0	0 ± 0.0 ^s	0 ± 0.0 ^s
1000.0	Toxic	0 ± 0.0 ^s	
Trial Summary	Equivocal	Negative	Negative
Positive Control ²			
Positive Control ⁴	338 ± 22.7	289 ± 12.9	222 ± 2.0

Experiment Number: 281351

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Hydroxy-1,4-naphthoquinone

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	5 ± 0.6	10 ± 3.8	8 ± 2.6	7 ± 2.3	4 ± 0.9
10.0	11 ± 3.3	4 ± 0.9	12 ± 3.5	6 ± 1.2	17 ± 2.4
33.0	6 ± 3.1	6 ± 1.2	29 ± 1.5	10 ± 2.5	10 ± 2.2
100.0	7 ± 0.9	3 ± 1.3	23 ± 1.3	24 ± 1.8	9 ± 2.0
166.0					20 ± 3.2
333.0	6 ± 1.2	2 ± 0.7	65 ± 4.2	60 ± 2.0	103 ± 17.7
1000.0	Toxic	Toxic	0 ± 0.0 ^s	0 ± 0.0 ^s	
Trial Summary	Negative	Negative	Positive	Positive	Positive
Positive Control ⁴			191 ± 11.6	78 ± 5.6	160 ± 18.2
Positive Control ⁵	894 ± 166.3	463 ± 139.4			

Experiment Number: 281351

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Hydroxy-1,4-naphthoquinone

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

Strain: TA1537

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	4 ± 0.6	6 ± 1.0	4 ± 0.7	4 ± 0.9
10.0	10 ± 0.9	11 ± 3.5	7 ± 0.9	5 ± 0.6
33.0	19 ± 5.3	18 ± 4.2	7 ± 2.8	9 ± 1.3
100.0	38 ± 1.7	25 ± 7.0	10 ± 2.7	6 ± 0.9
166.0	104 ± 16.6			12 ± 2.4
333.0	56 ± 9.0	18 ± 3.5	10 ± 1.2	11 ± 1.2
1000.0		Toxic	0 ± 0.0 ^s	
Trial Summary	Positive	Equivocal	Negative	Negative
Positive Control ⁴	158 ± 3.8	534 ± 5.4	479 ± 26.9	189 ± 12.1
Positive Control ⁵				

Experiment Number: 281351

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Hydroxy-1,4-naphthoquinone

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Rat S9	With 10% Rat S9
Vehicle Control ¹	17 ± 1.9	21 ± 1.5	35 ± 4.4	27 ± 4.2	17 ± 0.6
10.0	24 ± 2.3	15 ± 0.6	38 ± 3.2	30 ± 1.2	24 ± 2.7
33.0	25 ± 4.2	9 ± 2.1	43 ± 5.8	28 ± 6.9	21 ± 2.0
100.0	25 ± 3.1	12 ± 2.6	38 ± 4.0	27 ± 4.9	22 ± 1.7
166.0					21 ± 4.7
333.0	21 ± 2.6	6 ± 3.2	62 ± 14.3	62 ± 3.2	24 ± 12.2
1000.0	1 ± 1.0	Toxic	0 ± 0.0 ^s	0 ± 0.0 ^s	
Trial Summary	Negative	Negative	Equivocal	Equivocal	Negative
Positive Control ³			254 ± 18.8	230 ± 12.5	840 ± 24.2
Positive Control ⁶	600 ± 12.2	682 ± 72.7			

Experiment Number: 281351

Test Type: Genetic Toxicology - Bacterial
Mutagenicity

G06: Ames Summary Data

Test Compound: 2-Hydroxy-1,4-naphthoquinone

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

Strain: TA98

Dose (ug/Plate)	With 10% Rat S9	With 10% Hamster S9	With 10% Hamster S9	With 10% Hamster S9
Vehicle Control ¹	35 ± 0.7	29 ± 1.9	22 ± 2.8	23 ± 2.7
10.0	44 ± 3.2	35 ± 1.8	34 ± 4.8	28 ± 2.1
33.0	40 ± 3.4	41 ± 5.9	25 ± 1.0	26 ± 1.5
100.0	50 ± 3.6	36 ± 5.2	28 ± 2.5	20 ± 4.1
166.0	52 ± 4.9			21 ± 2.2
333.0	26 ± 1.5	18 ± 1.5	22 ± 2.3	11 ± 3.7
1000.0		0 ± 0.0 ^s	0 ± 0.0 ^s	
Trial Summary	Equivocal	Negative	Negative	Negative
Positive Control ³	394 ± 30.8	830 ± 61.5	1132 ± 4.2	889 ± 15.1
Positive Control ⁶				

Experiment Number: 281351

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

G06: Ames Summary Data

Test Compound: **2-Hydroxy-1,4-naphthoquinone**

CAS Number: 83-72-7

Date Report Requested: 09/11/2018

Time Report Requested: 15:00:40

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: 95% Ethanol

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

s: Slight Toxicity

**** END OF REPORT ****