

Experiment Number: 437414

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

G06: Ames Summary Data

Test Compound: **4-Chlorobenzaldehyde**

CAS Number: **104-88-1**

Date Report Requested: **09/10/2018**

Time Report Requested: **21:27:21**

NTP Study Number:

437414

Study Result:

Negative

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Test Compound: 4-Chlorobenzaldehyde
CAS Number: 104-88-1

Date Report Requested: 09/10/2018

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Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	88 ± 2.9	85 ± 2.9	93 ± 3.0	88 ± 5.4	83 ± 2.4
3.3		88 ± 9.8			
10.0	83 ± 7.9	97 ± 7.2	93 ± 8.5	102 ± 4.3	88 ± 3.2
33.0	86 ± 3.3	87 ± 10.1	92 ± 4.2	107 ± 7.2	87 ± 8.9
100.0	78 ± 2.0	82 ± 5.4	94 ± 9.1	93 ± 5.0	88 ± 3.8
333.0	77 ± 8.4	76 ± 3.5 ^s	89 ± 4.7	99 ± 3.8	80 ± 4.4
666.0	Toxic		82 ± 7.2 ^s	82 ± 7.9 ^s	Toxic
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					519 ± 9.5
Positive Control ³	321 ± 10.7	401 ± 16.0			
Positive Control ⁴			454 ± 32.7		
Positive Control ⁵					
Positive Control ⁶				745 ± 12.5	

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Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	105 ± 8.8
3.3	
10.0	99 ± 8.0
33.0	101 ± 8.2
100.0	89 ± 3.8
333.0	101 ± 4.9
666.0	98 ± 2.7 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁴	
Positive Control ⁵	440 ± 39.2
Positive Control ⁶	

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Strain: TA1535

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	14 ± 0.6	21 ± 2.5	9 ± 1.3	11 ± 2.2	10 ± 1.0
3.3		16 ± 2.1			
10.0	13 ± 1.8	16 ± 2.0	11 ± 0.7	10 ± 2.3	11 ± 1.2
33.0	15 ± 2.4	18 ± 3.9	10 ± 1.7	11 ± 1.2	10 ± 0.9
100.0	14 ± 1.2	19 ± 5.7	9 ± 1.9	9 ± 1.2	11 ± 0.6
333.0	15 ± 2.3	14 ± 1.5 ^s	6 ± 3.2	11 ± 1.8	9 ± 2.1
500.0	Toxic				
666.0			10 ± 3.4 ^s	13 ± 2.8 ^s	7 ± 0.3 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ²					45 ± 1.2
Positive Control ³	226 ± 5.0	213 ± 2.2			
Positive Control ⁵					
Positive Control ⁶			131 ± 8.0	162 ± 8.4	

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Strain: TA1535

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	10 ± 2.2
3.3	
10.0	13 ± 1.5
33.0	8 ± 2.7
100.0	11 ± 1.3
333.0	10 ± 1.8
500.0	
666.0	9 ± 1.2 ^s
Trial Summary	Negative
Positive Control ²	
Positive Control ³	
Positive Control ⁵	60 ± 9.0
Positive Control ⁶	

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Test Compound: 4-Chlorobenzaldehyde
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Date Report Requested: 09/10/2018

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Strain: TA1537

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control ¹	8 ± 1.8	12 ± 1.5	7 ± 1.2
3.3	3 ± 0.3		
10.0	6 ± 0.9	6 ± 0.3	11 ± 2.5
33.0	6 ± 1.5	8 ± 1.8	10 ± 1.0
100.0	6 ± 1.5	9 ± 2.1	5 ± 0.0
333.0	3 ± 1.0 ^s	7 ± 1.9	9 ± 1.2
500.0			
666.0		4 ± 1.2 ^s	5 ± 2.2 ^s
Trial Summary	Negative	Negative	Negative
Positive Control ⁷		87 ± 9.5	108 ± 3.8
Positive Control ⁸	42 ± 1.8		

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Strain: TA97

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	80 ± 2.9	67 ± 7.1	104 ± 0.7	169 ± 4.5	92 ± 7.5
3.3		71 ± 0.7			
10.0	80 ± 7.0	51 ± 4.7	102 ± 9.3	162 ± 2.9	88 ± 3.5
33.0	86 ± 3.8	68 ± 0.9	110 ± 4.7	147 ± 12.8	89 ± 4.0
100.0	79 ± 3.5	71 ± 4.5	103 ± 2.6	168 ± 3.5	92 ± 6.3
333.0	62 ± 4.3 ^s	70 ± 2.6 ^s	104 ± 3.9	146 ± 12.9	73 ± 1.8
500.0	Toxic				
666.0			73 ± 4.3 ^s	99 ± 3.1 ^s	65 ± 11.9 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ⁶			1434 ± 19.8		378 ± 4.1
Positive Control ⁷				733 ± 31.9	
Positive Control ⁹	370 ± 102.6	380 ± 11.6			

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Strain: TA97

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	161 ± 4.1
3.3	
10.0	139 ± 4.6
33.0	104 ± 10.2
100.0	111 ± 10.7
333.0	124 ± 4.3
500.0	
666.0	115 ± 4.0 ^s
Trial Summary	Negative
Positive Control ⁶	
Positive Control ⁷	824 ± 18.2
Positive Control ⁹	

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Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control ¹	19 ± 2.1	13 ± 0.7	25 ± 2.3	25 ± 1.5	23 ± 2.6
3.3		19 ± 4.4			
10.0	20 ± 3.8	13 ± 2.0	30 ± 3.2	28 ± 1.2	22 ± 1.3
33.0	12 ± 3.0	17 ± 2.0	26 ± 3.5	25 ± 1.7	25 ± 2.0
100.0	20 ± 4.0	15 ± 2.3	23 ± 4.5	21 ± 3.2	23 ± 3.4
333.0	20 ± 2.7	15 ± 2.0	27 ± 1.2	20 ± 2.0	25 ± 2.0
666.0	Toxic		20 ± 3.5 ^s	20 ± 2.1 ^s	4 ± 3.2 ^s
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control ¹⁰					181 ± 12.8
Positive Control ²			243 ± 9.7		
Positive Control ⁵				240 ± 2.1	
Positive Control ¹¹	170 ± 5.8	174 ± 13.8			

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Strain: TA98

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control ¹	22 ± 3.3
3.3	
10.0	26 ± 2.5
33.0	25 ± 0.9
100.0	22 ± 1.2
333.0	22 ± 2.7
666.0	24 ± 1.7 ^s
Trial Summary	Negative
Positive Control ¹⁰	
Positive Control ²	67 ± 2.3
Positive Control ⁵	
Positive Control ¹¹	

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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: 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: 0.2 ug/Plate 2-Aminoanthracene

11: 1.0 ug/Plate 4-Nitro-O-Phenylenediamine

s: Slight Toxicity

**** END OF REPORT ****