

Experiment Number: 578726

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

**G06: Ames Summary Data**

Test Compound: **o-Tolualdehyde**

CAS Number: **529-20-4**

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

Time Report Requested: **11:19:22**

**NTP Study Number:**

578726

**Study Result:**

Negative

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 CAS Number: 529-20-4

Date Report Requested: 09/14/2018  
 Time Report Requested: 11:19:22

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	89 ± 5.0	95 ± 1.3	105 ± 9.2	93 ± 3.0	83 ± 1.8
10.0	85 ± 4.1	96 ± 14.0	92 ± 9.4	84 ± 2.8	90 ± 5.4
33.0	79 ± 4.4	101 ± 4.2	92 ± 4.4	84 ± 1.9	78 ± 4.2
100.0	91 ± 5.8	89 ± 3.5	100 ± 1.2	93 ± 6.2	96 ± 5.6
333.0	93 ± 8.3	75 ± 4.7	83 ± 5.0	97 ± 4.4	86 ± 9.5
666.0	66 ± 4.8 <sup>s</sup>	77 ± 4.1 <sup>s</sup>	99 ± 2.6 <sup>s</sup>	96 ± 5.9	87 ± 9.3 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					307 ± 13.7
Positive Control <sup>3</sup>	412 ± 14.4	377 ± 37.0			
Positive Control <sup>4</sup>			234 ± 22.2		
Positive Control <sup>5</sup>					
Positive Control <sup>6</sup>				306 ± 10.5	

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Strain: TA100

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	86 ± 7.0
10.0	90 ± 5.4
33.0	99 ± 16.2
100.0	100 ± 1.5
333.0	97 ± 8.1
666.0	89 ± 4.1
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	
Positive Control <sup>4</sup>	
Positive Control <sup>5</sup>	344 ± 16.3
Positive Control <sup>6</sup>	

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## G06: Ames Summary Data

Test Compound: o-Tolualdehyde

CAS Number: 529-20-4

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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 <sup>1</sup>	12 ± 2.3	32 ± 1.9	13 ± 1.2	11 ± 2.3	13 ± 0.6
10.0	14 ± 2.0	33 ± 3.2	9 ± 1.5	8 ± 1.8	13 ± 0.9
33.0	11 ± 2.9	28 ± 5.3	10 ± 1.2	8 ± 1.5	12 ± 2.4
100.0	12 ± 1.2	23 ± 1.2	9 ± 1.7	10 ± 1.5	16 ± 4.6
333.0	17 ± 3.8	27 ± 2.3	9 ± 1.2	8 ± 1.7	7 ± 1.5
666.0	5 ± 1.2 <sup>s</sup>	20 ± 2.6 <sup>s</sup>	8 ± 1.0 <sup>s</sup>	6 ± 0.9 <sup>s</sup>	10 ± 2.0 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					72 ± 14.8
Positive Control <sup>3</sup>	178 ± 18.5	316 ± 4.9			
Positive Control <sup>5</sup>					
Positive Control <sup>6</sup>			114 ± 2.6	70 ± 6.2	

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G06: Ames Summary Data  
Test Compound: o-Tolualdehyde  
CAS Number: 529-20-4

Date Report Requested: 09/14/2018  
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Strain: TA1535

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	8 ± 2.4
10.0	9 ± 1.7
33.0	5 ± 0.6
100.0	8 ± 2.0
333.0	9 ± 2.3
666.0	7 ± 1.7 <sup>s</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	
Positive Control <sup>5</sup>	70 ± 5.5
Positive Control <sup>6</sup>	

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## G06: Ames Summary Data

Test Compound: o-Tolualdehyde

CAS Number: 529-20-4

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## Strain: TA1537

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 10% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	4 ± 2.2	9 ± 1.8	8 ± 0.7	8 ± 1.2	5 ± 0.0
10.0	4 ± 0.3	8 ± 2.7	6 ± 2.6	6 ± 0.3	4 ± 1.5
33.0	4 ± 1.2	7 ± 2.4	13 ± 0.9	7 ± 0.3	6 ± 0.0
100.0	6 ± 1.5	4 ± 0.9	5 ± 2.5	7 ± 3.0	6 ± 2.2
333.0	4 ± 1.3 <sup>s</sup>	5 ± 2.0	6 ± 0.9	9 ± 3.2	6 ± 3.2
666.0	4 ± 0.9 <sup>s</sup>	4 ± 0.3 <sup>s</sup>	5 ± 0.6	6 ± 1.8 <sup>s</sup>	5 ± 1.7 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>4</sup>				43 ± 2.5	
Positive Control <sup>6</sup>			78 ± 7.0		
Positive Control <sup>7</sup>					81 ± 4.7
Positive Control <sup>8</sup>	1251 ± 55.2	70 ± 4.0			

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## G06: Ames Summary Data

Test Compound: o-Tolualdehyde

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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 <sup>1</sup>	75 ± 4.1	88 ± 7.5	230 ± 11.6	109 ± 3.9	160 ± 22.6
10.0	61 ± 5.0	79 ± 9.4	160 ± 5.3	119 ± 10.7	150 ± 12.7
33.0	69 ± 3.1	85 ± 11.5	111 ± 55.4	106 ± 3.5	180 ± 17.5
100.0	58 ± 6.4	95 ± 10.7	119 ± 5.2	106 ± 4.4	158 ± 7.1
333.0	66 ± 4.9	114 ± 3.4	137 ± 16.2	115 ± 3.0	123 ± 9.0
666.0	6 ± 0.5 <sup>s</sup>	89 ± 14.5 <sup>s</sup>	118 ± 14.1 <sup>s</sup>	124 ± 1.2	118 ± 7.6 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>4</sup>					350 ± 10.6
Positive Control <sup>6</sup>			478 ± 20.7		
Positive Control <sup>7</sup>				346 ± 36.2	
Positive Control <sup>9</sup>	1377 ± 166.4	192 ± 2.1			

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Test Type: Genetic Toxicology - Bacterial  
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G06: Ames Summary Data

Test Compound: o-Tolualdehyde

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Strain: TA97

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	90 ± 5.2
10.0	90 ± 1.9
33.0	111 ± 8.3
100.0	89 ± 11.7
333.0	102 ± 4.8
666.0	99 ± 4.0 <sup>s</sup>
Trial Summary	Negative
Positive Control <sup>4</sup>	
Positive Control <sup>6</sup>	
Positive Control <sup>7</sup>	879 ± 120.3
Positive Control <sup>9</sup>	



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Test Compound: o-Tolualdehyde

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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 <sup>1</sup>	15 ± 1.2	11 ± 2.3	34 ± 4.2	24 ± 0.3	24 ± 2.7
10.0	17 ± 0.3	11 ± 1.0	25 ± 1.8	32 ± 1.2	28 ± 2.0
33.0	14 ± 0.7	12 ± 1.8	30 ± 2.5	25 ± 4.5	25 ± 2.6
100.0	15 ± 0.9	16 ± 1.3	25 ± 3.8	25 ± 2.2	26 ± 1.2
333.0	13 ± 4.6	11 ± 0.3	28 ± 3.8	27 ± 1.2	19 ± 1.5
666.0	13 ± 2.7 <sup>s</sup>	14 ± 0.6 <sup>s</sup>	26 ± 2.9 <sup>s</sup>	27 ± 3.2	24 ± 1.5 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>10</sup>					180 ± 7.8
Positive Control <sup>2</sup>			105 ± 2.1		
Positive Control <sup>11</sup>	164 ± 8.5	144 ± 8.2			
Positive Control <sup>5</sup>				118 ± 6.2	

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Strain: TA98

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Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	25 ± 3.7
10.0	28 ± 3.8
33.0	26 ± 1.3
100.0	30 ± 2.8
333.0	25 ± 1.3
666.0	29 ± 2.1 <sup>s</sup>
Trial Summary	Negative
Positive Control <sup>10</sup>	
Positive Control <sup>2</sup>	84 ± 5.8
Positive Control <sup>11</sup>	
Positive Control <sup>5</sup>	

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## LEGEND

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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 \*\*