

Experiment Number: 759526

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

**G06: Ames Summary Data**

Test Compound: **2-Methyl-3-butenitrile**

CAS Number: **16529-56-9**

Date Report Requested: **09/17/2018**

Time Report Requested: **15:31:21**

**NTP Study Number:**

759526

**Study Result:**

Negative

Experiment Number: 759526

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: 2-Methyl-3-butenitrile

CAS Number: 16529-56-9

Date Report Requested: 09/17/2018

Time Report Requested: 15:31:21

## 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>	88 ± 4.0	89 ± 3.9	85 ± 4.0	100 ± 9.0	94 ± 10.3
33.0		91 ± 5.0			
100.0	77 ± 5.5	90 ± 4.7	88 ± 4.3	89 ± 2.6	100 ± 5.6
333.0	90 ± 3.0	93 ± 5.0	100 ± 7.7	99 ± 4.1	103 ± 1.7
1000.0	104 ± 6.1	104 ± 9.6	100 ± 3.5	88 ± 9.4	99 ± 6.0
3333.0	93 ± 5.5 <sup>s</sup>	83 ± 6.1 <sup>s</sup>	99 ± 12.3	104 ± 5.3	92 ± 5.2
6666.0	18 ± 17.8 <sup>s</sup>		70 ± 3.8 <sup>s</sup>	67 ± 3.6 <sup>s</sup>	78 ± 5.2 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>	356 ± 3.5	429 ± 7.8			
Positive Control <sup>3</sup>			565 ± 15.8		511 ± 6.8
Positive Control <sup>4</sup>					
Positive Control <sup>5</sup>				559 ± 13.0	

Experiment Number: 759526  
Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

G06: Ames Summary Data  
Test Compound: 2-Methyl-3-butenitrile  
CAS Number: 16529-56-9

Date Report Requested: 09/17/2018  
Time Report Requested: 15:31:21

---

Strain: TA100

---

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	92 ± 3.4
33.0	
100.0	85 ± 2.7
333.0	94 ± 2.9
1000.0	87 ± 6.8
3333.0	91 ± 8.8
6666.0	32 ± 16.6 <sup>s</sup>
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	
Positive Control <sup>4</sup>	875 ± 61.6
Positive Control <sup>5</sup>	

Experiment Number: 759526

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: 2-Methyl-3-butenitrile

CAS Number: 16529-56-9

Date Report Requested: 09/17/2018

Time Report Requested: 15:31:21

## 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>	20 ± 1.5	19 ± 2.3	12 ± 2.2	14 ± 4.7	13 ± 2.2
33.0		24 ± 2.7			
100.0	23 ± 1.5	16 ± 2.8	12 ± 2.0	8 ± 1.9	9 ± 1.2
333.0	21 ± 3.5	16 ± 3.3	8 ± 3.2	14 ± 0.3	14 ± 1.3
1000.0	24 ± 5.0	18 ± 2.6	11 ± 0.9	11 ± 1.7	12 ± 1.8
3333.0	20 ± 2.6	16 ± 1.0 <sup>s</sup>	12 ± 2.0	13 ± 2.6	18 ± 2.0
6666.0	6 ± 3.5 <sup>s</sup>		6 ± 0.3 <sup>s</sup>	8 ± 2.2 <sup>s</sup>	8 ± 1.0 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>6</sup>					49 ± 1.0
Positive Control <sup>2</sup>	254 ± 9.0	298 ± 5.5			
Positive Control <sup>4</sup>					
Positive Control <sup>5</sup>			162 ± 2.7	170 ± 9.0	

Experiment Number: 759526  
Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

G06: Ames Summary Data  
Test Compound: 2-Methyl-3-butenitrile  
CAS Number: 16529-56-9

Date Report Requested: 09/17/2018  
Time Report Requested: 15:31:21

---

Strain: TA1535

---

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	12 ± 0.7
33.0	
100.0	11 ± 0.9
333.0	11 ± 2.3
1000.0	11 ± 0.7
3333.0	12 ± 1.5
6666.0	5 ± 0.9 <sup>s</sup>
Trial Summary	Negative
Positive Control <sup>6</sup>	
Positive Control <sup>2</sup>	
Positive Control <sup>4</sup>	94 ± 3.4
Positive Control <sup>5</sup>	

Experiment Number: 759526

Test Type: Genetic Toxicology - Bacterial Mutagenicity

**G06: Ames Summary Data**

Test Compound: 2-Methyl-3-butenitrile

CAS Number: 16529-56-9

Date Report Requested: 09/17/2018

Time Report Requested: 15:31:21

---

**Strain: TA1537**

---

<b>Dose (ug/Plate)</b>	<b>With 30% Rat S9</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	9 ± 1.9	5 ± 0.3
100.0	7 ± 1.8	6 ± 2.6
333.0	7 ± 2.6	7 ± 1.2
1000.0	10 ± 1.3	5 ± 0.3
3333.0	8 ± 0.6	3 ± 1.2
6666.0	4 ± 1.0 <sup>s</sup>	1 ± 0.3 <sup>s</sup>
Trial Summary	Negative	Negative
Positive Control <sup>7</sup>	65 ± 5.2	152 ± 9.4
Positive Control <sup>8</sup>		

Experiment Number: 759526

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

Test Compound: 2-Methyl-3-butenitrile

CAS Number: 16529-56-9

Date Report Requested: 09/17/2018

Time Report Requested: 15:31:21

**Strain: TA97**

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 5% Hamster S9
Vehicle Control <sup>1</sup>	85 ± 7.0	68 ± 5.2	83 ± 12.1	149 ± 4.8	66 ± 8.7
33.0		75 ± 6.3			
100.0	93 ± 1.0	79 ± 5.1	79 ± 11.6	161 ± 15.4	88 ± 3.8
333.0	83 ± 3.5	68 ± 5.2	80 ± 4.4	167 ± 8.3	92 ± 5.2
1000.0	115 ± 8.1	85 ± 26.3	94 ± 6.4	166 ± 14.4	80 ± 5.4
3333.0	50 ± 8.3 <sup>s</sup>	62 ± 3.5 <sup>s</sup>	89 ± 14.0	134 ± 11.8	75 ± 10.5
6666.0	14 ± 14.3 <sup>s</sup>		52 ± 4.3 <sup>s</sup>	100 ± 8.3 <sup>s</sup>	
6667.0					41 ± 5.9 <sup>s</sup>
Trial Summary	Equivocal	Negative	Negative	Negative	Negative
Positive Control <sup>3</sup>					
Positive Control <sup>5</sup>			913 ± 72.3		533 ± 35.7
Positive Control <sup>7</sup>				499 ± 13.6	
Positive Control <sup>9</sup>	187 ± 22.4	216 ± 17.9			

Experiment Number: 759526

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: 2-Methyl-3-butenitrile

CAS Number: 16529-56-9

Date Report Requested: 09/17/2018

Time Report Requested: 15:31:21

## Strain: TA97

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	86 ± 5.9	182 ± 34.7	116 ± 4.6
33.0			
100.0	90 ± 7.5	195 ± 8.5	110 ± 6.0
333.0	90 ± 4.1	254 ± 13.5	117 ± 6.2
1000.0	101 ± 7.1	240 ± 22.2	108 ± 14.5
3333.0	105 ± 4.0	291 ± 13.0	128 ± 4.7
6666.0	52 ± 4.4 <sup>s</sup>	124 ± 8.2 <sup>s</sup>	
6667.0			92 ± 10.4 <sup>s</sup>
Trial Summary	Negative	Equivocal	Negative
Positive Control <sup>3</sup>	452 ± 40.5		661 ± 91.7
Positive Control <sup>5</sup>			
Positive Control <sup>7</sup>		1163 ± 59.8	
Positive Control <sup>9</sup>			



Experiment Number: 759526

Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

## G06: Ames Summary Data

Test Compound: 2-Methyl-3-butenitrile

CAS Number: 16529-56-9

Date Report Requested: 09/17/2018

Time Report Requested: 15:31:21

## 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>	17 ± 2.6	17 ± 0.6	21 ± 2.3	26 ± 2.2	31 ± 2.0
33.0		16 ± 1.5			
100.0	15 ± 2.7	17 ± 2.3	27 ± 0.9	24 ± 4.2	28 ± 4.0
333.0	16 ± 1.2	13 ± 4.0	24 ± 2.0	31 ± 2.6	26 ± 2.3
1000.0	22 ± 2.6	20 ± 1.7	30 ± 1.8	26 ± 2.0	28 ± 3.8
3333.0	16 ± 2.5 <sup>s</sup>	16 ± 1.9 <sup>s</sup>	23 ± 1.9	24 ± 2.4	30 ± 3.8
6666.0	4 ± 3.5 <sup>s</sup>		18 ± 1.7 <sup>s</sup>	14 ± 1.2 <sup>s</sup>	16 ± 3.7 <sup>s</sup>
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>10</sup>					177 ± 6.8
Positive Control <sup>6</sup>			232 ± 11.1		
Positive Control <sup>4</sup>				165 ± 10.5	
Positive Control <sup>11</sup>	223 ± 5.9	159 ± 7.9			

Experiment Number: 759526  
Test Type: Genetic Toxicology - Bacterial  
Mutagenicity

G06: Ames Summary Data  
Test Compound: 2-Methyl-3-butenitrile  
CAS Number: 16529-56-9

Date Report Requested: 09/17/2018  
Time Report Requested: 15:31:21

---

Strain: TA98

---

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control <sup>1</sup>	37 ± 0.7
33.0	
100.0	29 ± 2.3
333.0	26 ± 2.6
1000.0	33 ± 4.6
3333.0	25 ± 1.8
6666.0	16 ± 0.5 <sup>s</sup>
Trial Summary	Negative
Positive Control <sup>10</sup>	
Positive Control <sup>6</sup>	78 ± 2.3
Positive Control <sup>4</sup>	
Positive Control <sup>11</sup>	

Experiment Number: 759526

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

**G06: Ames Summary Data**

Test Compound: **2-Methyl-3-butenitrile**

CAS Number: **16529-56-9**

Date Report Requested: **09/17/2018**

Time Report Requested: **15:31:21**

**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: 0.5 ug/Plate Sodium Azide

3: 0.75 ug/Plate 2-Aminoanthracene

4: 1.0 ug/Plate 2-Aminoanthracene

5: 2.0 ug/Plate 2-Aminoanthracene

6: 0.4 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 \*\***