

Experiment Number: 523108

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

**G06: Ames Summary Data**

Test Compound: **Vanadium pentoxide**

CAS Number: 1314-62-1

Date Report Requested: **09/12/2018**

Time Report Requested: **17:54:03**

**NTP Study Number:**

523108

**Study Result:**

Negative

Experiment Number: 523108

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Mutagenicity

## G06: Ames Summary Data

Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

Date Report Requested: 09/12/2018

Time Report Requested: 17:54:03

## Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9
Vehicle Control <sup>1</sup>	117 ± 5.2	127 ± 1.2	110 ± 7.2	103 ± 9.6	125 ± 6.5
0.1	102 ± 6.4	108 ± 9.3			
0.3	91 ± 5.5	118 ± 4.2	116 ± 4.7		
1.0	104 ± 4.2	104 ± 7.0	110 ± 3.3		134 ± 9.7
3.0	92 ± 6.1	102 ± 7.0	106 ± 8.2	104 ± 9.6	103 ± 5.7
6.0		100 ± 16.2			
10.0	49 ± 23.8		122 ± 16.5	99 ± 1.0	92 ± 4.4
33.0			124 ± 5.5	92 ± 3.1	106 ± 9.5
100.0				94 ± 18.5	56 ± 12.3
166.0					
333.0				17 ± 3.3 <sup>s</sup>	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					
Positive Control <sup>3</sup>			441 ± 9.8	521 ± 41.2	
Positive Control <sup>4</sup>	301 ± 15.2	390 ± 20.3			
Positive Control <sup>5</sup>					504 ± 20.6

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## Strain: TA100

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	135 ± 3.8	117 ± 2.6	149 ± 3.0
0.1			
0.3	152 ± 13.2		
1.0	127 ± 12.0		114 ± 10.5
3.0	119 ± 3.0	87 ± 3.8	108 ± 4.6
6.0			
10.0	108 ± 9.8	103 ± 5.8	91 ± 7.2
33.0	109 ± 20.5	105 ± 6.3	91 ± 10.0
100.0		57 ± 23.7	29 ± 7.9
166.0			
333.0		8 ± 3.2 <sup>s</sup>	
Trial Summary	Negative	Negative	Negative
Positive Control <sup>2</sup>	764 ± 17.2		
Positive Control <sup>3</sup>		457 ± 22.2	543 ± 22.6
Positive Control <sup>4</sup>			
Positive Control <sup>5</sup>			

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## G06: Ames Summary Data

Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

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Time Report Requested: 17:54:03

## 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>	13 ± 0.3	12 ± 0.9	10 ± 1.2	16 ± 1.2	10 ± 1.8
0.03	11 ± 0.7				
0.1	16 ± 2.0	15 ± 1.8			
0.3	16 ± 3.0	12 ± 0.9	11 ± 2.8	15 ± 0.9	9 ± 0.7
1.0	12 ± 0.9	16 ± 1.2	9 ± 0.9	14 ± 1.2	9 ± 1.2
3.0	13 ± 3.7	12 ± 1.7	9 ± 1.2	15 ± 1.3	8 ± 1.5
6.0		10 ± 1.5			
10.0			10 ± 2.2	12 ± 0.3	9 ± 2.6
33.0			10 ± 1.8	9 ± 0.3	7 ± 2.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>4</sup>	320 ± 12.1	383 ± 11.2			
Positive Control <sup>3</sup>					242 ± 13.4
Positive Control <sup>5</sup>			162 ± 9.8		
Positive Control <sup>6</sup>				138 ± 10.3	

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**G06: Ames Summary Data**

Test Compound: **Vanadium pentoxide**

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Date Report Requested: **09/12/2018**

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**Strain: TA1535**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	13 ± 3.5
0.03	
0.1	
0.3	8 ± 1.5
1.0	9 ± 0.9
3.0	10 ± 2.0
6.0	
10.0	11 ± 0.6
33.0	10 ± 1.8
Trial Summary	Negative
Positive Control <sup>4</sup>	
Positive Control <sup>3</sup>	
Positive Control <sup>5</sup>	319 ± 1.5
Positive Control <sup>6</sup>	

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## G06: Ames Summary Data

Test Compound: Vanadium pentoxide

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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>	157 ± 8.2	155 ± 11.7	181 ± 1.5	165 ± 6.9	159 ± 6.8
0.03	154 ± 6.8				
0.1	152 ± 6.4	168 ± 15.9			
0.3	148 ± 6.2	158 ± 12.3	167 ± 15.9	201 ± 6.4	185 ± 3.8
1.0	163 ± 3.7	147 ± 5.8	179 ± 9.6	172 ± 37.4	153 ± 12.1
3.0	161 ± 12.4	153 ± 3.8	183 ± 0.9	205 ± 11.1	154 ± 3.5
6.0		154 ± 3.4			
10.0			187 ± 5.5	169 ± 9.6	152 ± 16.5
33.0			148 ± 13.6	209 ± 7.5	119 ± 33.5
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					541 ± 23.7
Positive Control <sup>3</sup>			324 ± 10.1		
Positive Control <sup>5</sup>				343 ± 13.5	
Positive Control <sup>7</sup>	497 ± 34.3	374 ± 4.7			

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Test Compound: **Vanadium pentoxide**

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**Strain: TA97**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	173 ± 6.4
0.03	
0.1	
0.3	186 ± 6.7
1.0	149 ± 12.3
3.0	207 ± 2.3
6.0	
10.0	174 ± 11.4
33.0	156 ± 27.1
Trial Summary	Negative
Positive Control <sup>2</sup>	
Positive Control <sup>3</sup>	554 ± 16.8
Positive Control <sup>5</sup>	
Positive Control <sup>7</sup>	

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## G06: Ames Summary Data

Test Compound: Vanadium pentoxide

CAS Number: 1314-62-1

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## Strain: TA98

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9
Vehicle Control <sup>1</sup>	16 ± 0.3	17 ± 1.7	28 ± 2.1	27 ± 1.2	28 ± 1.9
0.1	11 ± 1.5	16 ± 1.8			
0.3	14 ± 1.7	14 ± 1.9	30 ± 2.0		
1.0	13 ± 2.0	16 ± 3.2	21 ± 1.9		28 ± 2.8
3.0	12 ± 0.3	13 ± 1.7	23 ± 2.0	26 ± 0.3	22 ± 2.4
6.0		14 ± 3.1			
10.0	8 ± 3.0		23 ± 2.5	28 ± 2.0	20 ± 0.6
33.0			23 ± 4.7	20 ± 1.7	15 ± 4.3
100.0				11 ± 2.3	9 ± 3.0
166.0					
333.0				5 ± 1.8	
Trial Summary	Negative	Negative	Negative	Negative	Negative
Positive Control <sup>2</sup>					
Positive Control <sup>3</sup>			286 ± 10.7	105 ± 6.5	148 ± 3.5
Positive Control <sup>8</sup>	409 ± 35.1	521 ± 13.1			



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## Strain: TA98

Dose (ug/Plate)	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control <sup>1</sup>	26 ± 1.5	23 ± 1.8	23 ± 1.5
0.1			
0.3	25 ± 0.7		
1.0	25 ± 2.0		20 ± 3.4
3.0	20 ± 1.9	28 ± 1.5	18 ± 0.7
6.0			
10.0	17 ± 2.2	22 ± 3.0	16 ± 1.2
33.0	16 ± 1.2	15 ± 0.6	7 ± 1.2
100.0		10 ± 4.0	4 ± 1.2
166.0			
333.0		2 ± 1.0	
Trial Summary	Negative	Negative	Negative
Positive Control <sup>2</sup>	614 ± 29.2		
Positive Control <sup>3</sup>		328 ± 4.3	364 ± 25.7
Positive Control <sup>8</sup>			

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## Strain: TA102

Dose (ug/Plate)	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9	With 10% Hamster S9
Vehicle Control <sup>1</sup>	180 ± 3.3	161 ± 4.1	267 ± 10.1	165 ± 0.3	228 ± 2.2
0.03	175 ± 18.0				
0.1	174 ± 7.2	157 ± 15.7			
0.3	158 ± 8.2	134 ± 9.5	196 ± 4.2	177 ± 11.2	169 ± 4.6
1.0	171 ± 8.4	111 ± 2.7	187 ± 6.7	207 ± 3.4	165 ± 3.2
3.0	179 ± 17.2	101 ± 9.0	151 ± 0.3	201 ± 3.5	163 ± 8.2
6.0		128 ± 14.0			
10.0			162 ± 5.2	189 ± 7.2	155 ± 1.5
33.0			190 ± 14.8	94 ± 52.9	137 ± 22.8
Trial Summary	Equivocal	Negative	Negative	Negative	Negative
Positive Control <sup>9</sup>	813 ± 13.5	739 ± 9.7			
Positive Control <sup>10</sup>			1077 ± 26.6	1236 ± 18.7	534 ± 59.0

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**Strain: TA102**

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<b>Dose (ug/Plate)</b>	<b>With 30% Hamster S9</b>
Vehicle Control <sup>1</sup>	242 ± 19.0
0.03	
0.1	
0.3	248 ± 6.7
1.0	253 ± 15.5
3.0	251 ± 18.2
6.0	
10.0	204 ± 5.5
33.0	223 ± 38.5
Trial Summary	Negative
Positive Control <sup>9</sup>	
Positive Control <sup>10</sup>	926 ± 74.0

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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: 0.5 ug/Plate 2-Aminoanthracene

3: 1.0 ug/Plate 2-Aminoanthracene

4: 1.0 ug/Plate Sodium Azide

5: 2.5 ug/Plate 2-Aminoanthracene

6: 5.0 ug/Plate 2-Aminoanthracene

7: 50.0 ug/Plate 9-Aminoacridine

8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine

9: 0.5 ug/Plate Mitomycin-C

10: 10.0 ug/Plate Sterigmatocystin

s: Slight Toxicity

**\*\* END OF REPORT \*\***