NTP Study Number: A62097

Study Result: Weakly Positive

Experiment Number: **A62097**

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

G06: Ames Summary Data

Test Compound: **All-trans retinol**

CAS Number: **68-26-8**

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

Time Report Requested: **09:18:45**

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 10% Rat S9	With 30% Rat S9
Vehicle Control[1]	122 ± 3.2	108 ± 4.2	119 ± 3.8	124 ± 2.6	130 ± 4.4
10.0	116 ± 1.7				
33.0	116 ± 7.6				
100.0	117 ± 6.7	111 ± 1.7	115 ± 3.8		123 ± 4.4
166.0		113 ± 3.6	121 ± 4.2		
333.0	137 ± 3.1	108 ± 2.9	129 ± 5.4		114 ± 6.1
666.0		120 ± 2.2[s]	138 ± 2.7[s]		
1000.0	167 ± 4.3[s]	128 ± 3.1[s]	150 ± 4.9[s]	115 ± 4.8	143 ± 3.0
1666.0				138 ± 8.7	
3333.0				184 ± 9.1	252 ± 16.3
6666.0				175 ± 8.4	
10000.0				29 ± 10.1[s]	181 ± 6.7[p]
Trial Summary	Equivocal	Negative	Equivocal	Equivocal	Equivocal
Positive Control[2]					
Positive Control[3]				831 ± 7.9	
Positive Control[4]	878 ± 19.5	838 ± 20.7	854 ± 18.7		
Positive Control[5]					570 ± 11.9

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Strain: TA100

Dose (ug/Plate)	With 30% Rat S9	With 30% Rat S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	116 ± 6.7	128 ± 2.2	124 ± 3.8	126 ± 1.2	107 ± 4.5
10.0					
33.0					
100.0				129 ± 1.2	
166.0					
333.0				129 ± 4.6	
666.0					
1000.0	107 ± 7.5	126 ± 2.9	110 ± 11.3	123 ± 2.5	107 ± 3.9
1666.0	108 ± 4.1	135 ± 3.0	122 ± 7.0		114 ± 5.0
3333.0	162 ± 8.6	170 ± 10.1	165 ± 10.8	186 ± 5.3	151 ± 4.6
6666.0	185 ± 6.8	208 ± 7.8	175 ± 5.4		183 ± 3.2
10000.0	267 ± 11.3[p]	284 ± 4.0[p]	28 ± 5.7[s]	164 ± 12.7[p]	217 ± 4.4[p]
Trial Summary	Positive	Positive	Weakly Positive	Equivocal	Positive
Positive Control[2]			951 ± 18.9		
Positive Control[3]				620 ± 12.8	751 ± 20.6
Positive Control[4]					
Positive Control[5]	618 ± 8.2	510 ± 7.5			

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Test Compound: **All-trans retinol**

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

Time Report Requested: **09:18:45**

Strain: TA100

Dose (ug/Plate)	With 30% Hamster S9
Vehicle Control[1]	124 ± 6.0
10.0	
33.0	
100.0	
166.0	
333.0	
666.0	
1000.0	131 ± 6.1
1666.0	147 ± 12.0
3333.0	178 ± 8.9
6666.0	203 ± 16.5
10000.0	265 ± 11.0[p]
Trial Summary	Positive
Positive Control[2]	
Positive Control[3]	575 ± 23.6
Positive Control[4]	
Positive Control[5]	

Experiment Number: **A62097**

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

G06: Ames Summary Data

Test Compound: **All-trans retinol**

CAS Number: **68-26-8**

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

Time Report Requested: **09:18:45**

Strain: TA1535

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control[1]	12 ± 1.5	13 ± 1.2	12 ± 2.3
100.0	12 ± 0.7	12 ± 2.5	10 ± 0.9
166.0	13 ± 2.6	12 ± 1.0	11 ± 1.3
333.0	9 ± 1.3	13 ± 1.2	13 ± 0.7
666.0	10 ± 0.0[s]	13 ± 0.7	10 ± 0.9
1000.0	7 ± 0.7[s]	11 ± 1.8[p]	10 ± 2.3[p]
Trial Summary	Negative	Negative	Negative
Positive Control[4]	926 ± 13.2		
Positive Control[5]			116 ± 6.8
Positive Control[6]		117 ± 10.7	

Experiment Number: **A62097**

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

G06: Ames Summary Data

Test Compound: **All-trans retinol**

CAS Number: **68-26-8**

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

Time Report Requested: **09:18:45**

Strain: TA98

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control[1]	20 ± 2.1	28 ± 2.6	23 ± 2.4
10.0	18 ± 1.5		
33.0	24 ± 0.3		
100.0	25 ± 2.3	28 ± 5.5	25 ± 1.9
333.0	23 ± 1.2	25 ± 4.1	22 ± 0.7
1000.0	12 ± 1.0[s]	19 ± 2.0	29 ± 3.3
3333.0		27 ± 2.5	23 ± 3.8
10000.0		14 ± 2.3[p]	20 ± 1.9[p]
Trial Summary	Negative	Negative	Negative
Positive Control[3]			561 ± 10.4
Positive Control[7]	500 ± 14.2		
Positive Control[5]		449 ± 16.3	

LEGEND

Values given as Mean or Mean ± 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: 1.0 ug/Plate 2-Aminoanthracene
3: 2.0 ug/Plate 2-Aminoanthracene
4: 5.0 ug/Plate Sodium Azide
5: 5.0 ug/Plate 2-Aminoanthracene
6: 10.0 ug/Plate 2-Aminoanthracene
7: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
p: Precipitate
s: Slight Toxicity

** END OF REPORT **