Experiment Number: **A46849**

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

G06: Ames Summary Data

Test Compound: **2,4-Hexadienal**

CAS Number: **142-83-6**

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

Time Report Requested: **03:14:14**

NTP Study Number: A46849

Study Result: Positive

Experiment Number: **A46849**

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

G06: Ames Summary Data

Test Compound: **2,4-Hexadienal**

CAS Number: **142-83-6**

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

Time Report Requested: **03:14:14**

Strain: TA100

Dose (ug/Plate)	Without S9	Without S9	Without S9	With 5% Rat S9	With 5% Rat S9
Vehicle Control[1]	108 ± 2.0	120 ± 2.6	99 ± 4.9	96 ± 2.6	121 ± 5.4
0.0		0 ± 0.0	0 ± 0.0	0 ± 0.0	0 ± 0.0
			3.0	119 ± 1.5	
			10.0	128 ± 3.3	119 ± 4.7
140 ± 2.8			33.0	121 ± 1.9	131 ± 0.3
141 ± 7.8			66.0		150 ± 3.6
	129 ± 1.2	113 ± 8.2	100.0	171 ± 8.0	155 ± 4.3
140 ± 5.5	142 ± 7.0	132 ± 2.5	166.0		210 ± 10.0
	151 ± 1.5	161 ± 11.0	333.0	82 ± 5.8[s]	
143 ± 3.8	187 ± 6.2	256 ± 23.0	666.0		
	140 ± 1.3	163 ± 7.0	1000.0		
167 ± 2.3					
Trial Summary	Equivocal	Weakly Positive	Positive	Positive	Positive
Positive Control[2]					
Positive Control[3]					552 ± 23.3
Positive Control[4]				757 ± 18.9	
Positive Control[5]					
Positive Control[6]	910 ± 17.3	946 ± 11.3	1166 ± 24.6		

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Strain: TA100

Dose (ug/Plate)	With 10% Rat S9	With 30% Rat S9	With 30% Rat S9	With 30% Rat S9	With 5% Hamster S9
Vehicle Control[1]	94 ± 4.5	145 ± 5.0	127 ± 5.2	135 ± 9.5	92 ± 6.9
0.0					
	114 ± 0.9	110 ± 1.9			148 ± 5.8
140 ± 2.8	139 ± 6.2	113 ± 12.9	157 ± 5.8		145 ± 5.7
141 ± 7.8	143 ± 5.7	181 ± 3.8	181 ± 3.1	153 ± 2.7	
	162 ± 3.3	314 ± 13.2	282 ± 12.7	209 ± 9.3	163 ± 5.0
140 ± 5.5	248 ± 10.0	384 ± 13.4	327 ± 11.3	246 ± 10.4	
	Toxic	Toxic	123 ± 32.9[s]	364 ± 8.3	175 ± 4.8
143 ± 3.8				229 ± 31.0[s]	
					84 ± 9.8[s]
167 ± 2.3					
Trial Summary	Positive	Negative	Weakly Positive	Weakly Positive	Positive
Positive Control[2]					
Positive Control[3]					758 ± 21.1
Positive Control[4]	630 ± 8.5				
Positive Control[5]		423 ± 16.8	473 ± 8.2	544 ± 17.8	
Positive Control[6]					

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CAS Number: **142-83-6**

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Strain: TA100

Dose (ug/Plate)	With 5% Hamster S9	With 10% Hamster S9	With 30% Hamster S9	With 30% Hamster S9	With 30% Hamster S9
Vehicle Control[1]	129 ± 13.8	128 ± 1.2	143 ± 3.6	129 ± 5.2	102 ± 5.7
0.0					
				126 ± 8.5	
			119 ± 7.5	156 ± 22.6	
140 ± 2.8			125 ± 2.4	185 ± 9.5	
141 ± 7.8	136 ± 6.6	162 ± 15.0	172 ± 1.5	248 ± 6.2	118 ± 19.3
	144 ± 10.0	167 ± 12.4	251 ± 11.8	281 ± 13.2	157 ± 18.8
140 ± 5.5	163 ± 10.7	215 ± 9.2	195 ± 16.0	228 ± 13.5[s]	240 ± 22.5
	205 ± 10.9	253 ± 13.8	Toxic		290 ± 14.1
143 ± 3.8	159 ± 13.3	136 ± 5.2			Toxic
167 ± 2.3					
Trial Summary	Positive	Positive	Negative	Equivocal	Positive
Positive Control[2]	585 ± 8.1				
Positive Control[3]		742 ± 4.7			
Positive Control[4]			477 ± 7.6	525 ± 13.3	627 ± 17.9
Positive Control[5]					
Positive Control[6]					

Experiment Number: **A46849**

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

G06: Ames Summary Data

Test Compound: **2,4-Hexadienal**

CAS Number: **142-83-6**

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

Time Report Requested: **03:14:14**

Strain: TA1535

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control[1]	10 ± 0.9	10 ± 1.2	11 ± 0.9
10.0	12 ± 0.0		
33.0	10 ± 1.2		
66.0	11 ± 2.0	10 ± 0.9	11 ± 0.9
100.0	11 ± 0.7	10 ± 0.9	9 ± 0.6
166.0	11 ± 0.9	11 ± 1.5	9 ± 0.3
333.0		12 ± 2.2	10 ± 1.2
666.0		12 ± 3.7	9 ± 0.6
Trial Summary	Negative	Negative	Negative
Positive Control[6]	825 ± 18.3		
Positive Control[5]			202 ± 12.1
Positive Control[7]		152 ± 14.5	

Experiment Number: **A46849**

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

G06: Ames Summary Data

Test Compound: **2,4-Hexadienal**

CAS Number: **142-83-6**

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

Time Report Requested: **03:14:14**

Strain: TA98

Dose (ug/Plate)	Without S9	With 30% Rat S9	With 30% Hamster S9
Vehicle Control[1]	15 ± 1.8	24 ± 1.5	17 ± 1.2
3.0	20 ± 4.2		
10.0	16 ± 1.2	25 ± 1.2	19 ± 3.5
33.0	21 ± 1.7	29 ± 3.8	20 ± 5.4
100.0	23 ± 1.5	29 ± 2.9	15 ± 1.5
333.0	2 ± 1.7[x]	30 ± 2.3	18 ± 0.3
1000.0		19 ± 5.5	11 ± 0.9
Trial Summary	Negative	Negative	Negative
Positive Control[4]			356 ± 8.0
Positive Control[8]	456 ± 17.3		
Positive Control[5]		312 ± 8.1	

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: 0.5 ug/Plate 2-Aminoanthracene
3: 1.0 ug/Plate 2-Aminoanthracene
4: 2.0 ug/Plate 2-Aminoanthracene
5: 5.0 ug/Plate 2-Aminoanthracene
6: 5.0 ug/Plate Sodium Azide
7: 10.0 ug/Plate 2-Aminoanthracene
8: 2.5 ug/Plate 4-Nitro-O-Phenylenediamine
s: Slight Toxicity
x: Slight Toxicity and Precipitate

** END OF REPORT **