

Experiment Number: **G10949D**

Test Type: **Genetic Toxicology - In Vivo Alkaline Comet Assay**

Route: **Oral Gavage**

Species/Strain: **Mouse/C57B1/6J**

**G01: In Vivo Alkaline Comet Summary Data**

Test Compound: **Acrylamide**

CAS Number: **79-06-1**

Date Report Requested: **11/19/2018**

Time Report Requested: **10:19:09**

**NTP Study Number:**

G10949D

**Study Duration:**

4 day

**Male Study Result:**

Positive

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Sex: Male; Time interval between final treatment and cell sampling: 4 h

Dose (mg/kg/day)	N	Blood		Kidney		
		Percent Tail DNA	p-Value	N	Percent Tail DNA	p-Value
Vehicle Control <sup>1</sup>	4	1.694 ± 0.074		4	7.540 ± 0.859	
12.5	4	18.536 ± 1.415	0.1535	4	20.884 ± 2.462	0.0011 *
25	4	19.897 ± 1.460	0.0803	4	25.252 ± 1.692	< 0.001 *
50	4	45.391 ± 4.294	< 0.001 *	4	43.411 ± 3.861	< 0.001 *
Trend p-Value		< 0.001 *			< 0.001 *	
Positive Control <sup>2</sup>	4	57.090 ± 3.947	0.0105 *	4	65.939 ± 3.887	0.0105 *

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Dose (mg/kg/day)	N	Liver		N	Lung	
		Percent Tail DNA	p-Value		Percent Tail DNA	p-Value
Vehicle Control <sup>1</sup>	4	9.816 ± 1.919		4	15.612 ± 1.964	
12.5	4	23.663 ± 1.717	< 0.001 *	4	25.840 ± 1.383	0.2062
25	4	25.814 ± 1.630	< 0.001 *	4	26.287 ± 0.291	0.0564
50	4	38.136 ± 3.137	< 0.001 *	4	41.383 ± 4.305	< 0.001 *
Trend p-Value		< 0.001 *			< 0.001 *	
Positive Control <sup>2</sup>	4	43.629 ± 2.622	< 0.001 *	4	46.935 ± 2.997	< 0.001 *

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Dose (mg/kg/day)	N	Testes Gamete		N	Testes Somatic	
		Percent Tail DNA	p-Value		Percent Tail DNA	p-Value
Vehicle Control <sup>1</sup>	4	2.307 ± 0.250		4	6.013 ± 1.218	
12.5	4	5.773 ± 0.885	0.0494	4	11.867 ± 1.396	0.0016 *
25	4	6.941 ± 1.346	0.0194 *	4	12.900 ± 0.294	< 0.001 *
50	4	12.940 ± 2.204	< 0.001 *	4	20.280 ± 1.264	< 0.001 *
Trend p-Value		< 0.001 *			< 0.001 *	
Positive Control <sup>2</sup>	4	24.138 ± 2.593	< 0.001 *	4	35.549 ± 1.731	< 0.001 *

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Dose (mg/kg/day)	N	Blood		N	Kidney	
		Percent Tail DNA	p-Value		Percent Tail DNA	p-Value
Vehicle Control <sup>1</sup>	4	1.590 ± 0.261		4	6.292 ± 0.747	
12.5	4	16.355 ± 2.039	< 0.001 *	4	18.211 ± 0.583	< 0.001 *
25	4	27.808 ± 1.516	< 0.001 *	4	32.144 ± 2.083	< 0.001 *
50	4	37.903 ± 1.223	< 0.001 *	4	41.357 ± 0.948	< 0.001 *
Trend p-Value		< 0.001 *			< 0.001 *	
Positive Control <sup>2</sup>	4	45.241 ± 2.097	< 0.001 *	4	53.585 ± 1.849	< 0.001 *

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Dose (mg/kg/day)	N	Liver		N	Lung	
		Percent Tail DNA	p-Value		Percent Tail DNA	p-Value
Vehicle Control <sup>1</sup>	4	12.573 ± 0.622		4	15.253 ± 1.405	
12.5	4	26.233 ± 1.756	< 0.001 *	4	26.167 ± 0.881	0.2062
25	4	33.608 ± 1.467	< 0.001 *	4	33.716 ± 4.578	0.0262
50	4	39.778 ± 1.645	< 0.001 *	4	40.825 ± 1.948	0.0016 *
Trend p-Value		< 0.001 *			< 0.001 *	
Positive Control <sup>2</sup>	4	42.190 ± 1.094	0.0105 *	4	43.339 ± 1.991	< 0.001 *

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**Sex: Male; Time interval between final treatment and cell sampling: 4 h**

Dose (mg/kg/day)	N	Testes Gamete		N	Testes Somatic	
		Percent Tail DNA	p-Value		Percent Tail DNA	p-Value
Vehicle Control <sup>1</sup>	4	1.475 ± 0.233		4	8.582 ± 2.120	
12.5	4	3.980 ± 0.586	0.3521	4	14.056 ± 2.054	0.1122
25	4	12.390 ± 3.205	0.0072 *	4	25.359 ± 5.086	0.0019 *
50	4	12.179 ± 0.828	0.0027 *	4	22.579 ± 1.351	0.0019 *
Trend p-Value		< 0.001 *			0.0045 *	
Positive Control <sup>2</sup>	4	12.875 ± 2.773	0.0033 *	4	25.326 ± 2.460	0.0010 *

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LEGEND

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CAS Number = Chemical Abstracts Service registry number

N = Number of subjects

Values given as Mean or Mean  $\pm$  Standard Error Mean

Pairwise comparison with the control group; values are significant at  $P \leq 0.025$  by Williams or Dunn's test

Dose-related trend; significant at  $P \leq 0.025$  by linear regression or Jonckheere's test

\* Statistically significant pairwise or trend test

1: Vehicle Control: Water

2: 100 mg/kg/day Ethyl methanesulfonate

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