

Experiment Number: 787385

Test Type: Genetic Toxicology - Micronucleus

Route: Intraperitoneal Injection

Species/Strain: Mouse/B6C3F1

G04: In Vivo Micronucleus Summary Data

Test Compound: 1,4-Dioxane

CAS Number: 123-91-1

Date Report Requested: 09/19/2018

Time Report Requested: 20:11:04

NTP Study Number:

787385

Study Duration:

96 Hours

Study Methodology:

Slide Scoring

Male Study Result:

Equivocal

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Date Report Requested: 09/19/2018
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Tissue: Blood; Sex: Male; Number of Treatments: 3; Time interval between final treatment and cell sampling: 48 h

Dose (mg/kg)	N	MN PCE/1000	p-Value	% PCE
		Mean ± SEM		Mean ± SEM
Vehicle Control ¹	5	1.90 ± 0.29		1.46 ± 0.25
800.0	5	0.90 ± 0.19	0.9707	3.22 ± 0.85
1200.0	5	1.40 ± 0.29	0.8082	1.96 ± 0.38
1600.0	5	1.70 ± 0.41	0.6307	1.28 ± 0.35
Trend p-Value		0.6620		

Trial Summary: Equivocal

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Tissue: Bone marrow; Sex: Male; Number of Treatments: 3; Time interval between final treatment and cell sampling: 24 h

Dose (mg/kg)	N	MN PCE/1000	p-Value	% PCE
		Mean ± SEM		Mean ± SEM
Vehicle Control ¹	5	1.40 ± 0.29		37.10 ± 4.96
500.0	5	2.00 ± 0.42	0.2217	37.76 ± 2.68
1000.0	5	2.10 ± 1.03	0.1891	41.32 ± 2.35
2000.0	5	2.80 ± 0.44	0.0538	35.10 ± 3.21
Trend p-Value		0.0560		
Positive Control ²	5	10.90 ± 1.91	< 0.001 *	35.92 ± 2.07

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Tissue: Bone marrow; Sex: Male; Number of Treatments: 3; Time interval between final treatment and cell sampling: 24 h

		MN PCE/1000		% PCE	
Dose (mg/kg)	N	Mean ± SEM	p-Value	Mean ± SEM	
Vehicle Control ¹	5	2.00 ± 0.16		28.46 ± 1.72	
500.0	5	3.90 ± 0.89	0.0066 *	33.04 ± 1.88	
1000.0	5	3.90 ± 0.48	0.0066 *	32.16 ± 1.96	
2000.0	5	3.40 ± 0.99	0.0282	28.22 ± 2.72	
Trend p-Value		0.0970			
Positive Control ²	5	11.40 ± 2.81	< 0.001 *	29.62 ± 2.62	

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LEGEND

MN = micronucleated, PCE = polychromatic erythrocyte, NCE = normochromatic erythrocyte

CAS Number = Chemical Abstracts Service registry number

N = Number of subjects

Values given as Mean or Mean \pm Standard Error Mean

Results were tabulated as the mean of the pooled results from all animals within a treatment group, plus or minus the standard error of the mean

Pairwise comparison to the concurrent control, dosed groups significant at $p = 0.025/\text{number of treatment groups}$; positive control value is significant at $p = 0.05$

Cochran-Armitage trend test, significant at $p = 0.025$

* Statistically significant pairwise or trend test

1: Vehicle Control: Phosphate Buffered Saline

2: 0.2 mg/kg Mitomycin-C

**** END OF REPORT ****