Experiment Number: **906732**
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: **21:13:24**

NTP Study Number:	906732
Study Duration:	72 Hours
Study Methodology:	Slide Scoring
Male Study Result:	Negative

Experiment Number: **906732**

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: **21:13:24**

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	3.90 ± 0.62		38.90 ± 9.24
500.0	5	4.50 ± 0.67	0.2559	44.90 ± 6.17
1000.0	5	2.90 ± 0.58	0.8878	48.80 ± 8.58
2000.0	5	2.00 ± 0.50	0.9934	34.40 ± 6.53
Trend p-Value		0.9980		
Positive Control[2]	5	6.70 ± 1.33	0.0032 *	16.80 ± 2.27

Trial Summary: Negative

Experiment Number: **906732**

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: **21:13:24**

Tissue: Bone marrow; Sex: Male; Number of Treatments: 1; 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	2.60 ± 0.60		28.60 ± 4.22
2000.0	5	3.60 ± 0.68	0.1017	37.40 ± 3.98
3000.0	5	2.40 ± 0.58	0.6115	28.20 ± 5.84
4000.0	5	2.90 ± 0.40	0.3427	27.60 ± 3.69
Trend p-Value		0.4690		
Positive Control[3]	5	3.10 ± 0.73	0.2536	30.80 ± 6.78

Trial Summary: Negative

Experiment Number: **906732**

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: **21:13:24**

Tissue: Bone marrow; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 48 h

		MN PCE/1000		% PCE
Dose (mg/kg)	**N**	**Mean ± SEM**	**p-Value**	**Mean ± SEM**
Vehicle Control[1]	5	3.10 ± 0.37		28.70 ± 4.92
2000.0	5	2.30 ± 0.51	0.8622	24.90 ± 1.65
3000.0	5	2.50 ± 0.52	0.7890	33.30 ± 5.45
4000.0	5	4.20 ± 0.46	0.0986	29.30 ± 4.85
Trend p-Value		0.1510		
Positive Control[3]	5	2.70 ± 0.58	0.7006	20.60 ± 3.60

Trial Summary: Negative

Experiment Number: **906732**

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: **21:13:24**

Tissue: Bone marrow; Sex: Male; Number of Treatments: 1; 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]	6	2.42 ± 0.30		30.83 ± 5.38
2000.0	6	4.17 ± 0.98	0.0090	25.25 ± 5.18
3000.0	6	1.50 ± 0.22	0.9459	21.00 ± 2.26
4000.0	6	1.67 ± 0.31	0.9010	17.00 ± 2.89
Trend p-Value		0.9660		
Positive Control[4]	6	17.17 ± 1.66	< 0.001 *	38.58 ± 3.20

Trial Summary: Negative

Experiment Number: **906732**

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: **21:13:24**

Tissue: Bone marrow; Sex: Male; Number of Treatments: 1; Time interval between final treatment and cell sampling: 48 h

		MN PCE/1000		% PCE
Dose (mg/kg)	**N**	**Mean ± SEM**	**p-Value**	**Mean ± SEM**
Vehicle Control[1]	6	2.67 ± 0.31		37.67 ± 4.70
2000.0	6	2.83 ± 0.48	0.4026	25.17 ± 3.37
3000.0	6	3.25 ± 0.46	0.2027	30.67 ± 4.74
4000.0	6	2.75 ± 0.94	0.4506	18.00 ± 1.72
Trend p-Value		0.3540		
Positive Control[4]	6	5.50 ± 0.52	< 0.001 *	19.33 ± 4.88

Trial Summary: Negative

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 ± 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/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
3: 15.0 mg/kg Cyclophosphamide
4: 0.5 mg/kg Mitomycin-C

** END OF REPORT **