Experiment Number: **563272**
Test Type: **Genetic Toxicology - Micronucleus**
Route: **Intraperitoneal Injection**
Species/Strain: **Mouse/B6C3F1**

G04: In Vivo Micronucleus Summary Data
Test Compound: **Titanium dioxide**
CAS Number: **13463-67-7**

Date Report Requested: **09/19/2018**
Time Report Requested: **18:23:03**

NTP Study Number:	563272
Study Duration:	96 Hours
Study Methodology:	Slide Scoring
Male Study Result:	Positive

Experiment Number: **563272**
Test Type: **Genetic Toxicology - Micronucleus**
Route: **Intraperitoneal Injection**
Species/Strain: **Mouse/B6C3F1**

G04: In Vivo Micronucleus Summary Data
Test Compound: **Titanium dioxide**
CAS Number: **13463-67-7**

Date Report Requested: **09/19/2018**
Time Report Requested: **18:23:03**

Tissue: Blood; Sex: Male; Number of Treatments: 3; 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	2.30 ± 0.41		7.50 ± 0.16
250.0	5	3.60 ± 0.51	0.0450	6.80 ± 1.48
500.0	5	3.50 ± 0.55	0.0573	8.10 ± 1.33
1000.0	4	3.13 ± 0.43	0.1431	3.63 ± 0.85
Trend p-Value		0.2220		

Trial Summary: Positive

Experiment Number: **563272**

Test Type: **Genetic Toxicology - Micronucleus**

Route: **Intraperitoneal Injection**

Species/Strain: **Mouse/B6C3F1**

G04: In Vivo Micronucleus Summary Data

Test Compound: **Titanium dioxide**

CAS Number: **13463-67-7**

Date Report Requested: **09/19/2018**

Time Report Requested: **18:23:03**

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	1.70 ± 0.25		58.20 ± 2.79
250.0	5	3.00 ± 0.47	0.0288	61.20 ± 4.86
500.0	5	2.60 ± 0.48	0.0847	59.60 ± 9.48
1000.0	5	3.50 ± 0.45	0.0062 *	48.30 ± 5.83
Trend p-Value		0.0160 *		
Positive Control[2]	5	5.20 ± 0.93	< 0.001 *	36.80 ± 5.99

Trial Summary: Positive

Experiment Number: **563272**
Test Type: **Genetic Toxicology - Micronucleus**
Route: **Intraperitoneal Injection**
Species/Strain: **Mouse/B6C3F1**

G04: In Vivo Micronucleus Summary Data
Test Compound: **Titanium dioxide**
CAS Number: **13463-67-7**

Date Report Requested: **09/19/2018**
Time Report Requested: **18:23:03**

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	1.90 ± 0.19		51.40 ± 1.49
1500.0	5	2.90 ± 0.64	0.0742	45.00 ± 3.67
2000.0	1	5.00 ± 0.00	< 0.001 *	33.00 ± 0.00
Trend p-Value		0.0740		
Positive Control[2]	5	6.10 ± 0.46	< 0.001 *	29.30 ± 4.74

Trial Summary: Positive

Experiment Number: **563272**

Test Type: **Genetic Toxicology - Micronucleus**

Route: **Intraperitoneal Injection**

Species/Strain: **Mouse/B6C3F1**

G04: In Vivo Micronucleus Summary Data

Test Compound: **Titanium dioxide**

CAS Number: **13463-67-7**

Date Report Requested: **09/19/2018**

Time Report Requested: **18:23:03**

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	1.50 ± 0.27		49.80 ± 3.71
500.0	5	2.60 ± 0.37	0.0427	48.60 ± 7.08
1000.0	5	3.60 ± 0.78	0.0016 *	51.30 ± 4.28
1500.0	5	2.00 ± 0.35	0.1988	47.60 ± 2.06
Trend p-Value		0.1280		
Positive Control[2]	5	10.50 ± 0.76	< 0.001 *	50.10 ± 6.57

Trial Summary: Positive

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: Corn Oil
2: 12.5 mg/kg Dimethylbenzanthracene

** END OF REPORT **