

Experiment Number: **G07002E**

Test Type: **Genetic Toxicology - Micronucleus**

Route: **Dosed feed**

Species/Strain: **Rat/Sprague-Dawley**

G04: In Vivo Micronucleus Summary Data

Test Compound: **Zinc Carbonate, Basic**

CAS Number: **5263-02-5**

Date Report Requested: **01/28/2019**

Time Report Requested: **11:03:08**

NTP Study Number:

G07002E

Study Duration:

12 month

Study Methodology:

Flow cytometry

Male Study Result:

Negative

Female Study Result:

Negative

Experiment Number: G07002E
Test Type: Genetic Toxicology - Micronucleus
Route: Dosed feed
Species/Strain: Rat/Sprague-Dawley

G04: In Vivo Micronucleus Summary Data
Test Compound: Zinc Carbonate, Basic
CAS Number: 5263-02-5

Date Report Requested: 01/28/2019
Time Report Requested: 11:03:08

Sex: Male; Diet: Zinc Deficient; Number of Treatments: 370; Time interval between final treatment and cell sampling: 24h

Dose (ppm)	N	MN PCE/1000		N	MN NCE/1000		% PCE	
		Mean ± SEM	p-Value		Mean ± SEM	p-Value	Mean ± SEM	p-Value
Vehicle Control ¹	5	1.140 ± 0.062		5	0.086 ± 0.033		1.200 ± 0.100	
7	5	0.950 ± 0.101	0.9720	5	0.044 ± 0.006	1.0000	1.000 ± 0.100	0.2230
3.5	5	0.700 ± 0.022	0.9890	5	0.044 ± 0.003	1.0000	0.900 ± 0.100	0.0640
Trend p-Value		1.0000			0.9680		0.0460	

Trial Summary: Negative

Experiment Number: G07002E
Test Type: Genetic Toxicology - Micronucleus
Route: Dosed feed
Species/Strain: Rat/Sprague-Dawley

G04: In Vivo Micronucleus Summary Data
Test Compound: Zinc Carbonate, Basic
CAS Number: 5263-02-5

Date Report Requested: 01/28/2019
Time Report Requested: 11:03:08

Sex: Male; Diet: Excess Zinc; Number of Treatments: 370; Time interval between final treatment and cell sampling: 24h

Dose (ppm)	N	MN PCE/1000		N	MN NCE/1000		% PCE	
		Mean ± SEM	p-Value		Mean ± SEM	p-Value	Mean ± SEM	p-Value
Vehicle Control ¹	5	1.140 ± 0.062		5	0.086 ± 0.033		1.200 ± 0.100	
250	5	0.910 ± 0.068	0.8460	5	0.055 ± 0.007	1.0000	1.200 ± 0.100	0.7880
500	5	0.990 ± 0.113	0.9080	5	0.036 ± 0.004	1.0000	1.100 ± 0.100	0.5370
Trend p-Value		0.8750			0.9880		0.4290	

Trial Summary: Negative

Experiment Number: G07002E
 Test Type: Genetic Toxicology - Micronucleus
 Route: Dosed feed
 Species/Strain: Rat/Sprague-Dawley

G04: In Vivo Micronucleus Summary Data
 Test Compound: Zinc Carbonate, Basic
 CAS Number: 5263-02-5

Date Report Requested: 01/28/2019
 Time Report Requested: 11:03:08

Sex: Female; Diet: Zinc Deficient; Number of Treatments: 370; Time interval between final treatment and cell sampling: 24h

Dose (ppm)	N	MN PCE/1000		N	MN NCE/1000		% PCE	
		Mean ± SEM	p-Value		Mean ± SEM	p-Value	Mean ± SEM	p-Value
Vehicle Control ¹	5	1.220 ± 0.046		5	0.054 ± 0.010		1.000 ± 0.300	
7	5	1.290 ± 0.155	0.7400	5	0.043 ± 0.007	0.6500	1.000 ± 0.100	0.7290
3.5	5	0.788 ± 0.154	0.8200	5	0.046 ± 0.015	0.7360	2.700 ± 0.200	0.2110
Trend p-Value		0.9760			0.6870		0.1640	

Trial Summary: Negative

Experiment Number: G07002E
 Test Type: Genetic Toxicology - Micronucleus
 Route: Dosed feed
 Species/Strain: Rat/Sprague-Dawley

G04: In Vivo Micronucleus Summary Data
 Test Compound: Zinc Carbonate, Basic
 CAS Number: 5263-02-5

Date Report Requested: 01/28/2019
 Time Report Requested: 11:03:08

Sex: Female; Diet: Excess Zinc; Number of Treatments: 370; Time interval between final treatment and cell sampling: 24h

Dose (ppm)	N	MN PCE/1000		N	MN NCE/1000		% PCE	
		Mean ± SEM	p-Value		Mean ± SEM	p-Value	Mean ± SEM	p-Value
Vehicle Control ¹	5	1.220 ± 0.046		5	0.054 ± 0.010		1.000 ± 0.300	
250	4	0.975 ± 0.156	0.8420	4	0.030 ± 0.005	0.8900	1.300 ± 0.300	0.4430
500	4	0.925 ± 0.131	0.9110	4	0.030 ± 0.006	0.9430	0.900 ± 0.100	0.5320
Trend p-Value		0.9630			0.9720		0.8090	

Trial Summary: Negative

Experiment Number: **G07002E**
Test Type: **Genetic Toxicology - Micronucleus**
Route: **Dosed feed**
Species/Strain: **Rat/Sprague-Dawley**

G04: In Vivo Micronucleus Summary Data
Test Compound: **Zinc Carbonate, Basic**
CAS Number: **5263-02-5**

Date Report Requested: **01/28/2019**
Time Report Requested: **11:03:08**

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

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: 38 ppm Feed

**** END OF REPORT ****