

Experiment Number: **G07002D**

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: **11:02:39**

NTP Study Number:

G07002D

Study Duration:

9 month

Study Methodology:

Flow cytometry

Male Study Result:

Negative

Female Study Result:

Negative

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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: 11:02:39

Sex: Male; Diet: Zinc Deficient; Number of Treatments: 278; 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 | 0.994 ± 0.136 | | 5 | 0.073 ± 0.008 | | 0.900 ± 0.100 | |
| 7 | 5 | 1.030 ± 0.101 | 0.6630 | 5 | 0.122 ± 0.015 | 0.0530 | 1.100 ± 0.100 | 0.2360 |
| 3.5 | 5 | 0.760 ± 0.081 | 0.7480 | 5 | 0.106 ± 0.024 | 0.0650 | 0.900 ± 0.000 | 0.2820 |
| Trend p-Value | | 0.9230 | | | 0.1060 | | 0.7120 | |

Trial Summary: Negative

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Date Report Requested: 01/28/2019
 Time Report Requested: 11:02:39

Sex: Male; Diet: Excess Zinc; Number of Treatments: 278; 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 | 0.994 ± 0.136 | | 5 | 0.073 ± 0.008 | | 0.900 ± 0.100 | |
| 250 | 5 | 1.470 ± 0.200 | 0.0680 | 5 | 0.177 ± 0.043 | 0.1040 | 1.000 ± 0.100 | 0.4670 |
| 500 | 5 | 1.210 ± 0.111 | 0.0820 | 5 | 0.074 ± 0.008 | 0.7770 | 1.000 ± 0.000 | 0.5620 |
| Trend p-Value | | 0.1920 | | | 0.3960 | | 0.6030 | |

Trial Summary: Negative

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Date Report Requested: 01/28/2019
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Sex: Female; Diet: Zinc Deficient; Number of Treatments: 278; 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 | 1.020 ± 0.064 | | 5 | 0.024 ± 0.003 | | 0.800 ± 0.100 | |
| 7 | 5 | 0.960 ± 0.171 | 0.5640 | 5 | 0.040 ± 0.009 | 0.1060 | 0.900 ± 0.100 | 0.5550 |
| 3.5 | 5 | 1.040 ± 0.126 | 0.5380 | 5 | 0.036 ± 0.009 | 0.1260 | 0.900 ± 0.100 | 0.3900 |
| Trend p-Value | | 0.4560 | | | 0.1350 | | 0.3060 | |

Trial Summary: Negative

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Sex: Female; Diet: Excess Zinc; Number of Treatments: 278; 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 | 1.020 ± 0.064 | | 5 | 0.024 ± 0.003 | | 0.800 ± 0.100 | |
| 250 | 5 | 0.869 ± 0.145 | 1.0000 | 5 | 0.030 ± 0.007 | 0.2240 | 0.900 ± 0.200 | 0.7410 |
| 500 | 5 | 0.820 ± 0.108 | 1.0000 | 5 | 0.028 ± 0.001 | 0.2710 | 0.800 ± 0.100 | 0.8610 |
| Trend p-Value | | 0.8310 | | | 0.2650 | | 0.8360 | |

Trial Summary: Negative

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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

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 ****