

Experiment Number: **G07002**  
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: **11:00:25**

<b>NTP Study Number:</b>	G07002
<b>Study Duration:</b>	19 Days
<b>Study Methodology:</b>	Flow cytometry
<b>Male Study Result:</b>	Negative
<b>Female Study Result:</b>	Negative

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Sex: Male; Diet: Zinc Deficient; Number of Treatments: 19; Time interval between final treatment and cell sampling: 24h

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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 <sup>1</sup>	5	0.860 ± 0.215		5	0.349 ± 0.066		2.600 ± 0.100	
7	5	0.890 ± 0.070	0.4570	5	0.327 ± 0.037	0.6950	2.300 ± 0.200	0.4260
3.5	5	0.742 ± 0.077	1.0000	5	0.241 ± 0.065	0.7800	1.400 ± 0.100	< 0.001 *
Trend p-Value		0.5840			0.9020		< 0.001 *	

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Trial Summary: Negative

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Sex: Male; Diet: Excess Zinc; Number of Treatments: 19; Time interval between final treatment and cell sampling: 24h

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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 <sup>1</sup>	5	0.860 ± 0.215		5	0.349 ± 0.066		2.600 ± 0.100	
250	5	0.660 ± 0.070	1.0000	5	0.243 ± 0.083	0.8710	3.300 ± 0.100	0.1660
500	5	0.780 ± 0.152	1.0000	5	0.134 ± 0.024	0.9280	2.400 ± 0.100	0.1960
Trend p-Value		0.5210			0.9870		0.5570	

Trial Summary: Negative

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**Sex: Female; Diet: Zinc Deficient; Number of Treatments: 19; Time interval between final treatment and cell sampling: 24h**

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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 <sup>1</sup>	5	0.623 ± 0.085		5	0.126 ± 0.041		0.900 ± 0.200	
7	5	0.970 ± 0.086	0.0110 *	5	0.232 ± 0.026	0.1000	1.300 ± 0.200	0.1170
3.5	5	0.860 ± 0.064	0.0130 *	5	0.180 ± 0.054	0.1200	1.300 ± 0.100	0.0920
Trend p-Value		0.0450			0.2010		0.0740	

Trial Summary: **Negative**

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Sex: Female; Diet: Excess Zinc; Number of Treatments: 19; Time interval between final treatment and cell sampling: 24h

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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 <sup>1</sup>	5	0.623 ± 0.085		5	0.126 ± 0.041		0.900 ± 0.200	
250	5	0.700 ± 0.076	0.3680	5	0.124 ± 0.014	0.5060	1.300 ± 0.300	0.1850
500	5	0.620 ± 0.068	0.4380	5	0.149 ± 0.025	0.3490	1.600 ± 0.300	0.0970
Trend p-Value		0.5110			0.2850		0.0730	

Trial Summary: Negative

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#### LEGEND

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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 \*\***