

Experiment Number: **G18032C**

Test Type: **Genetic Toxicology - In Vitro
Micronucleus**

G03: In Vitro Micronucleus Summary Data

Test Compound: **Roundup Super Concentrate|Distilled Water**

Date Report Requested: **09/24/2021**

Time Report Requested: **14:25:48**

NTP Study Number:

G18032C

Cell Type:

TK6

Study Result:

Negative

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Date Report Requested: 09/24/2021

Test Type: Genetic Toxicology - In Vitro
Micronucleus

Time Report Requested: 14:25:48

Duration: 4 h; Activation: Without S9

Concentration (dilution)	% Relative Survival	% Apoptosis and Necrosis	Fold Change in Apoptosis and Necrosis	% MN	p-Value
	Mean	Mean	Mean	Mean ± SEM	
Vehicle Control ¹	100.0	1.79	1.0	0.466 ± 0.038	
0.000067	94.1	1.87	1.0	0.633 ± 0.059	0.3758
0.000095	94.1	2.77	1.5	0.520 ± 0.053	1.0000
0.000134	103.4	2.3	1.3	0.487 ± 0.103	1.0000
0.00019	98.7	1.53	0.9	0.400 ± 0.114	1.0000
0.000233	97.0	1.57	0.9	0.533 ± 0.070	1.0000
0.000285	95.6	2.0	1.1	0.353 ± 0.064	1.0000
0.000349	97.5	1.63	0.9	0.440 ± 0.122	1.0000
0.000428	91.4	1.5	0.8	0.427 ± 0.037	1.0000
0.000524	90.3	1.63	0.9	0.467 ± 0.082	1.0000
0.000642	78.6	2.07	1.2	0.340 ± 0.046	1.0000
0.000786	84.6	1.87	1.0	0.473 ± 0.077	1.0000
0.001111	13.6	67.37	37.7	23.400 ± 11.380	
Trend p-Value				0.8452	
VIN ²	73.7	8.6	4.8	2.560 ± 0.389	0.0010 *
Trial Summary: Negative					

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Date Report Requested: 09/24/2021

Test Type: Genetic Toxicology - In Vitro
 Micronucleus

Time Report Requested: 14:25:48

Duration: 24 h; Activation: Without S9

Concentration (dilution)	% Relative Survival	% Apoptosis and Necrosis	Fold Change in Apoptosis and Necrosis	% MN		p-Value
	Mean	Mean	Mean	Mean ± SEM		
Vehicle Control ¹	100.0	1.74	1.0	0.432 ±	0.029	
0.000067	102.5	2.0	1.2	0.713 ±	0.125	0.0884
0.000095	100.4	1.8	1.0	0.380 ±	0.053	1.0000
0.000134	101.2	1.63	0.9	0.327 ±	0.035	1.0000
0.00019	94.7	2.0	1.2	0.333 ±	0.037	1.0000
0.000233	95.2	1.53	0.9	0.453 ±	0.070	1.0000
0.000285	92.8	2.03	1.2	0.473 ±	0.058	1.0000
0.000349	80.4	3.4	2.0	0.513 ±	0.055	0.7154
0.000428	67.4	8.4	4.8	1.090 ±	0.120	
0.000524	58.0	16.4	9.5	1.180 ±	0.160	
0.000642	0.5	98.87	57.0	0.460 ±	0.460	
0.000786	0.1	99.53	57.4	2.250 ±	2.250	
0.001111	0.0	98.9	57.0	100.000 ±	100.000	
Trend p-Value				0.2901		
VIN ³	89.8	5.8	3.3	2.790 ±	0.117	< 0.001 *
Trial Summary: Negative						

Experiment Number: G18032C

G03: In Vitro Micronucleus Summary Data
 Test Compound: Roundup Super Concentrate|Distilled Water

Date Report Requested: 09/24/2021

Test Type: Genetic Toxicology - In Vitro
Micronucleus

Time Report Requested: 14:25:48

Duration: 4 h; Activation: With 1% Rat S9

Concentration (dilution)	% Relative Survival	% Apoptosis and Necrosis	Fold Change in Apoptosis and Necrosis	% MN	p-Value
	Mean	Mean	Mean	Mean ± SEM	
Vehicle Control ¹	100.0	1.78	1.0	0.505 ± 0.037	
0.000047	105.7	1.8	1.0	1.060 ± 0.325	0.1255
0.000066	107.9	1.67	0.9	1.800 ± 0.386	0.0110 *
0.000093	102.8	1.87	1.1	0.880 ± 0.286	0.8741
0.000132	100.7	1.8	1.0	0.900 ± 0.348	1.0000
0.000161	100.7	1.9	1.1	1.087 ± 0.487	0.5173
0.000197	105.0	1.53	0.9	0.893 ± 0.380	1.0000
0.000242	103.9	1.8	1.0	0.807 ± 0.389	1.0000
0.000296	97.3	1.8	1.0	0.800 ± 0.332	1.0000
0.000363	99.2	1.63	0.9	0.740 ± 0.216	1.0000
0.000444	103.2	1.4	0.8	0.640 ± 0.261	1.0000
0.000544	95.2	1.8	1.0	0.893 ± 0.304	0.9639
0.000769	43.0	8.93	5.0	1.860 ± 0.620	
Trend p-Value				0.0851	
CPA ⁴	53.7	8.3	4.7	2.750 ± 0.225	0.0010 *
Trial Summary: Negative					

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LEGEND

MN = Micronuclei, CAS = Chemical abstract registry

For the 4 h chemical exposures with and without S9, the medium with test article (and S9, if present) is changed after 4 h and replaced with fresh medium without test article or S9, and cells are cultured for an additional 20 h to achieve a total culture time of 24 h

Values given as Mean or Mean \pm Standard Error Mean

Statistical analysis only performed on: % MN

Pairwise comparison with the vehicle control; values are significant at $P \leq 0.025$ by Dunn's test

Positive control: pairwise comparison with the vehicle control; values are significant at $P \leq 0.05$ by Mann Whitney U test

Apoptotic and necrotic cells are detected in the assay as ethidium monoazide (EMA)-positive events

Concentration-related trend; significant at $P \leq 0.025$ by Jonckheere's test

* Statistically significant pairwise or trend test

The number of wells per concentration of test article = 3

1: Vehicle Control: Distilled Water

2: Positive Control: 3 ng/mL Vinblastine sulfate

3: Positive Control: 0.5 ng/mL Vinblastine sulfate

4: Positive Control: 3 ug/mL Cyclophosphamide monohydrate

**** END OF REPORT ****