G04: In Vivo Micronucleus Summary Data
Test Compound: Goldenseal Extract
CAS Number: 84603-60-1

NTP Study Number: G98047
Study Duration: 5 day
Study Methodology: Flow cytometry
Male Study Result: Negative
Experiment Number: **G98047**  
Test Type: **Genetic Toxicology - Micronucleus**  
Route: **Oral gavage**  
Species/Strain: **Rat/F344/NTac**

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**Tissue:** Blood; **Sex:** Male; **Number of Treatments:** 5; **Time interval between final treatment and cell sampling:** 24 h

<table>
<thead>
<tr>
<th>Dose (mg/kg/day)</th>
<th>N</th>
<th>Mean ± SEM</th>
<th>p-Value</th>
<th>N</th>
<th>Mean ± SEM</th>
<th>p-Value</th>
<th>Mean ± SEM</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Control¹</td>
<td>6</td>
<td>0.767 ± 0.076</td>
<td>0.9478</td>
<td>6</td>
<td>0.075 ± 0.005</td>
<td>1.0000</td>
<td>2.908 ± 0.252</td>
<td>0.6315</td>
</tr>
<tr>
<td>94</td>
<td>6</td>
<td>0.567 ± 0.079</td>
<td>0.9772</td>
<td>6</td>
<td>0.072 ± 0.003</td>
<td>1.0000</td>
<td>3.268 ± 0.414</td>
<td>0.7495</td>
</tr>
<tr>
<td>188</td>
<td>6</td>
<td>0.608 ± 0.093</td>
<td>0.9849</td>
<td>6</td>
<td>0.082 ± 0.016</td>
<td>1.0000</td>
<td>3.010 ± 0.216</td>
<td>0.4550</td>
</tr>
<tr>
<td>375</td>
<td>6</td>
<td>0.442 ± 0.100</td>
<td>0.9882</td>
<td>6</td>
<td>0.043 ± 0.007</td>
<td>1.0000</td>
<td>3.366 ± 0.311</td>
<td>0.3972</td>
</tr>
<tr>
<td>750</td>
<td>6</td>
<td>0.558 ± 0.069</td>
<td>0.9900</td>
<td>6</td>
<td>0.057 ± 0.009</td>
<td>1.0000</td>
<td>3.925 ± 0.256</td>
<td>0.0367</td>
</tr>
<tr>
<td>1500</td>
<td>6</td>
<td>0.508 ± 0.062</td>
<td>0.9900</td>
<td>6</td>
<td>0.074 ± 0.018</td>
<td>1.0000</td>
<td>3.333 ± 0.355</td>
<td>0.0162 *</td>
</tr>
</tbody>
</table>

Trend p-Value  
0.9260  
0.9544  
0.0162 *

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**Trial Summary:** Negative
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
Pairwise comparison with the control group; values are significant at P <= 0.025 by Williams or Dunn's test
Dose-related trend; significant at P <= 0.025 by linear regression or Jonckheere's test
* Statistically significant pairwise or trend test
1: Vehicle Control: Corn Oil

** END OF REPORT **