

**Experiment Number:** C20605-01

**Test Type:** TOX

**Route:** Oral Gavage

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

**PA49: Summary of Cytochrome Activity**

**Test Compound:** Gum Guggul Extract

**CAS Number:** GUMGUGGULEXT

**Date Report Requested:** 05/09/2017

**Time Report Requested:** 13:58:44

**Lab:** NTP

**C Number:** C20605-01

**Cage Range:** All

**Date Range:** All

**Reasons For Removal:** All

**Removal Date Range:** All

**Treatment Groups:** All

**Study Gender:** Both

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**Male: Day 28 Males**

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**Treatment Groups (mg/kg)**

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	<b>0</b>	<b>62.5</b>	<b>125</b>	<b>250</b>	<b>500</b>
Cytochrome P450 2B1 (pmol/mg/min)	5.535 ± 0.558 (10) **	8.167 ± 1.114 (10) *	7.581 ± 0.709 (10) *	11.237 ± 1.274 (10) **	20.957 ± 2.754 (10) **
Cytochrome P450 3A4 (pmol/mg/min)	922.1 ± 83.2 (10) **	1294.0 ± 74.8 (10) **	1197.6 ± 60.1 (10) *	1288.0 ± 97.9 (10) *	1654.0 ± 142.0 (10) **

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**Male: Day 28 Males**

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**Treatment Groups (mg/kg)**

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**1000**

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Cytochrome P450 2B1 (pmol/mg/min)	38.700 ± 6.105 (10) **
Cytochrome P450 3A4 (pmol/mg/min)	1982.0 ± 100.3 (10) **

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**Male: Day 92 Males**

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**Treatment Groups (mg/kg)**

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	<b>0</b>	<b>62.5</b>	<b>125</b>	<b>250</b>	<b>500</b>
Cytochrome P450 2B1 (pmol/mg/min)	5.686 ± 0.381 (10) **	6.544 ± 0.641 (10)	8.994 ± 0.933 (10) **	12.960 ± 1.765 (10) **	33.930 ± 3.768 (10) **
Cytochrome P450 3A4 (pmol/mg/min)	1174.4 ± 81.9 (10) **	1363.0 ± 126.9 (10)	1449.0 ± 44.6 (10)	1653.0 ± 133.5 (10) **	2005.0 ± 138.5 (10) **

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**Male: Day 92 Males**

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**Treatment Groups (mg/kg)**

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**1000**

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Cytochrome P450 2B1 (pmol/mg/min)	61.820 ± 5.718 (10) **
Cytochrome P450 3A4 (pmol/mg/min)	1905.0 ± 135.5 (10) **

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**Female: Day 28 Females**

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**Treatment Groups (mg/kg)**

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	<b>0</b>	<b>62.5</b>	<b>125</b>	<b>250</b>	<b>500</b>
Cytochrome P450 2B1 (pmol/mg/min)	2.458 ± 0.155 (10) **	3.069 ± 0.084 (10)	2.660 ± 0.123 (10)	2.824 ± 0.206 (10)	4.109 ± 0.311 (10) **
Cytochrome P450 3A4 (pmol/mg/min)	112.9 ± 6.9 (10) **	171.8 ± 13.9 (10) **	189.8 ± 12.3 (10) **	293.1 ± 31.2 (10) **	452.1 ± 24.1 (10) **

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**Female: Day 28 Females**

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**Treatment Groups (mg/kg)**

**1000**

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Cytochrome P450 2B1 (pmol/mg/min)	6.788 ± 1.255 (10) **
Cytochrome P450 3A4 (pmol/mg/min)	731.1 ± 60.2 (10) **

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**Female: Day 92 Females**

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**Treatment Groups (mg/kg)**

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	<b>0</b>	<b>62.5</b>	<b>125</b>	<b>250</b>	<b>500</b>
Cytochrome P450 2B1 (pmol/mg/min)	3.237 ± 0.226 (9) **	3.118 ± 0.181 (10)	3.738 ± 0.309 (9)	3.708 ± 0.231 (10)	5.118 ± 0.594 (9) *
Cytochrome P450 3A4 (pmol/mg/min)	71.2 ± 3.7 (9) **	140.5 ± 7.9 (10) **	219.3 ± 19.9 (9) **	300.8 ± 20.8 (10) **	411.7 ± 36.8 (9) **

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**Female: Day 92 Females**

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**Treatment Groups (mg/kg)**

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**1000**

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Cytochrome P450 2B1 (pmol/mg/min)	10.875 ± 2.284 (10) **
Cytochrome P450 3A4 (pmol/mg/min)	666.7 ± 40.7 (10) **

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#### LEGEND

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Data are displayed as mean  $\pm$  SEM (N)

Statistical analysis performed by Jonckheere (trend) and Shirley or Dunn (pairwise) tests

Statistical significance for a treatment group indicates a significant pairwise test compared to the vehicle control group

Statistical significance for the control group indicates a significant trend test

\* Statistically significant at  $P \leq 0.05$

\*\* Statistically significant at  $P \leq 0.01$

**\*\* END OF REPORT \*\***