

Study Number: S0939
Test Type: Human Liver Microsome

PA49: Summary of Cytochrome Activity
Test Compound: E-guggulsterone
CAS Number: 39025-24-6

Date Report Requested: 11/26/2019
Time Report Requested: 09:53:25
Lab: Research Triangle Institute

C Number: S0939

Study Gender: NA

PWG Approval Date See web page for date of PWG Approval

Study Number: S0939
Test Type: Human Liver Microsome

PA49: Summary of Cytochrome Activity
Test Compound: E-guggulsterone
CAS Number: 39025-24-6

Date Report Requested: 11/26/2019
Time Report Requested: 09:53:25
Lab: Research Triangle Institute

| | Treatment Groups (uM) | | | | |
|--|-----------------------|---------------------|---------------------|----------------------|-----------------------|
| | 0 | 0.3 | 1 | 10 | 20 uM Ver |
| Cytochrome P450 1A2 (acetaminophen) (nmol/min/mg protein) | 0.524 ± 0.041 (3) | 0.501 ± 0.017 (3) | 0.480 ± 0.029 (3) | 0.496 ± 0.014 (3) | NR |
| Cytochrome P450 2A6 (7- OH Coumarin) (nmol/min/mg protein) | 0.589 ± 0.058 (3) ** | 0.496 ± 0.006 (3) * | 0.478 ± 0.010 (3) * | 0.478 ± 0.012 (3) * | NR |
| Cytochrome P450 2C8 (6a-OH-paclitaxel) (nmol/min/mg protein) | 0.101 ± 0.009 (2) | 0.060 ± 0.000 (2) | 0.083 ± 0.019 (3) | 0.070 ± 0.023 (3) | NR |
| Cytochrome P450 2C9 (4- OH tolbutamide) (nmol/min/mg protein) | 0.085 ± 0.001 (3) ** | 0.085 ± 0.001 (3) | 0.068 ± 0.002 (3) * | 0.056 ± 0.001 (3) ** | NR |
| Cytochrome P450 2C19 (HO-methenytol) (pmol/min/mg protein) | 5.889 ± 0.382 (3) * | 6.644 ± 0.105 (3) | 6.010 ± 0.082 (3) | 4.572 ± 0.074 (3) | NR |
| Cytochrome P450 2D6 (Dextrorphan) (nmol/min/mg protein) | 0.079 ± 0.004 (3) | 0.076 ± 0.010 (3) | 0.082 ± 0.005 (3) | 0.087 ± 0.002 (3) | NR |
| Cytochrome P450 2E1 (4- nitrocatechol) (nmol/min/mg protein) | 1.059 ± 0.031 (3) | NR | NR | 1.021 ± 0.019 (3) | NR |
| Cytochrome P450 3A4 (1- OH Midazolam) (nmol/min/mg protein) | 0.134 ± 0.017 (3) | 0.108 ± 0.054 (3) | 0.130 ± 0.017 (3) | 0.095 ± 0.048 (3) | NR |
| Cytochrome P450 3A4 (6b-OH Testosterone) (nmol/min/mg protein) | 2.427 ± 0.205 (3) | 2.455 ± 0.127 (2) | 2.347 ± 0.142 (2) | 2.483 ± 0.095 (3) | NR |
| Cytochrome P450 4a (12- OH Luic Acid) (nmol/min/mg protein) | 0.029 ± 0.002 (3) | 0.025 ± 0.002 (3) | 0.026 ± 0.004 (3) | 0.019 ± 0.008 (3) | NR |
| P-glycoprotein ATPase Activity (nmol/min/mg protein) | 0.968 ± 0.482 (5) * | 4.987 ± 4.987 (3) | 8.110 ± 1.360 (2) | 15.450 ± 4.300 (2) | 44.053 ± 1.109 (6) ** |

Study Number: S0939

Test Type: Human Liver Microsome

PA49: Summary of Cytochrome Activity

Test Compound: E-guggulsterone

CAS Number: 39025-24-6

Date Report Requested: 11/26/2019

Time Report Requested: 09:53:25

Lab: Research Triangle Institute

LEGEND

Data are displayed as mean \pm SEM (N) unless otherwise noted.

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

Statistical analysis for the positive control group compared to the vehicle control group was performed using the Wilcoxon test.

* Statistically significant at $P \leq 0.05$

** Statistically significant at $P \leq 0.01$

Cytochrome P450 2E1 was not measured for the 0.3 and 1 μ M dose groups. Positive controls were only run for the ATPase activity assay.

Ver = Verpamil

NR not recorded

**** END OF REPORT ****