

Male C57BL/6 Mouse Microsomes — Liver, Pooled, Frozen, 10 mg @ 20 mg/mL

Product: M00511 | Lot: MZV****

Storage: ≤ -70 °C

Protein & p450 Concentration

Parameter	Specification	Result	
Protein	20—26 mg/mL	23.8	mg/mL
Total P450	nmol/mg	0.583	nmol/mg
Volume	≥ 0.5 mL	0.56	mL
Number of Donors	≥ 3 male C57BL/6 mouse donors	500	donors

Protein and p450 values are average concentrations of samples from the beginning, middle, and end of the production run.

Metabolic Activity

			Conc.		
	Enzyme	Substrate	[µM]	Metabolite	Result**
ECOD	7- Ethoxycoumarin O-deethylation	7-ethoxycoumarin	75	7-HC, 7-HCG, and 7-HCS*	1056
UGT	7-Hydroxycoumarin glucuronidation	7-hydroxycoumarin	30	7-HCG	2060
CYP1A2	Phenacetin O-deethylation	Phenacetin	15	acetaminophen	410
CYP2A6	Coumarin 7-hydroxylation	Coumarin	8	7-HC, 7-HCG, and 7-HCS	0
CYP2C9	Tolbutamide methyl- hydroxylation	Tolbutamide	150	4'-methylhydroxytolbutamide	120
CYP2C19	S-Mephenytoin 4'- hydroxylation	S-mephenytoin	20	4'-hydroxymephenytoin	28.5
CYP2D6	Dextromethorphan O- demethylation	Dextromephorphan	8	dextrorphan	173
CYP2E1	Chlorzoxazone 6-hydroxylation	Chlorzoxazone	100	6-hydroxychlorzoxazone	1195
CYP3A4	Testosterone 6B-hydroxylation	Testosterone	50	6β-hydroxytestosterone	275

^{*7-}hydroxycoumarin (7-HC), 7-hydroxycoumarin glucuronide (7-HCG), 7-hydroxycoumarin sulfate (7-HCS) **Metabolite rate of formation is measured in pmol/min/mg

Metabolic assays are run in triplicate. Activity results analyzed by HPLC-UV or LC/MS/MS validated procedures. Metabolite formation for all enzymes is measured after a 30 minute incubation at 37°C, 5% CO₂ and a final protein concentration of 0.5 mg.

**** Updated to include metabolism and volume data.

Results for this lot have been derived through validated testing methods and confirmed by Quality Assurance.

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