XENOTECH
A BioIVT Company

Data Sheet

D1000 Lot No. 2010046

Beagle Dog Liver Microsomes
Untreated, Male, Pool of 6
0.5 mL at 20 mg protein / mL
Suspension medium: 250 mM sucrose

Specific Content and Enzyme Activities		***Content / Rate***
Cytochrome P450 content	(nmol/mg protein)	0.612
Cytochrome b_5 content	(nmol/mg protein)	0.344
NADPH-cytochrome *c* reductase	(nmol/mg protein/min)	112 ± 3
7-Ethoxycoumarin *O*-dealkylation	(pmol/mg protein/min)	3130 ± 70

Characterization is performed when the first lot of a product from a given subcellular fraction (*e.g., S9*) is prepared. Values for enzyme activities were determined at a single substrate concentration and are mean ± standard deviation of three or more determinations.

To measure cytochrome P450 (CYP) activity, liver microsomes (50 µg/mL) were incubated in triplicate at 37 ± 2°C for 10 minutes in potassium phosphate buffer (50 mM, pH 7.4), containing $MgCl_2$ (3.0 mM), EDTA (1.0 mM), NADP (1.0 mM), glucose-6-phosphate (5.0 mM), glucose-6-phosphate dehydrogenase (1 Unit/mL) and 7-ethoxycoumarin (500 µM), at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

Animal Information

Species:	Dog; *Canis familiaris*
Strain:	Beagle
Sex:	Male
Age:	>6 months
Vendor:	Covance, Cumberland, VA

Animals were housed in an AAALAC-accredited facility and allowed to acclimate ≥ seven days before use.

Food:	Nutrena (*ad libitum*)
Water:	Automatic watering system, tap water (*ad libitum*)
Light/dark cycle:	Not monitored
Temperature:	Ranges from 62°-82°F
Humidity:	Not monitored
Cage:	Indoor/outdoor run cages, plastic coated rod bottom, sanitized at least every 2 weeks

Store at -80°C

CAUTION: This sample should be considered as a potential biohazard and universal precautions should be followed. Intended for *in vitro* use only.

Datasheet prepared 16 April 2020