

## R1093 Lot No. 1210084

Sprague Dawley (SD) Rat Liver Microsomes

Dexamethasone-treated, Male, Pool of 50

0.5 mL at 20 mg protein / mL

Suspension medium: 250 mM sucrose

### Specific content and activities <sup>a</sup>

### Content / Rate

Cytochrome P450	(nmol/mg protein)	0.889
Cytochrome b <sub>5</sub>	(nmol/mg protein)	0.524
NADPH-cytochrome c reductase	(nmol/mg protein/min)	394 ± 68
Testosterone 6β-hydroxylation	(pmol/mg protein/min)	10800

**Background:** Typically, treatment of male rats with dexamethasone causes a 4- to 6-fold induction of liver microsomal CYP3A levels, which is associated with an increase in testosterone 6β-hydroxylation. The magnitude of induction of CYP3A activity is greater in female rats (>20-fold) than male rats (3- to 5-fold) because CYP3A activity is constitutively higher in male rats. Because of this difference in “control” activity, CYP3A activity in male rats is less inducible than that in female rats.

<sup>a</sup> Characterization is performed when the first lot of a product from a given subcellular fraction (e.g., S9) is prepared. Subsequent lots are subject to a verification test only. Values for enzyme activities were determined at a single substrate concentration and are mean ± standard deviation of three or more determinations.

#### Animal Information

Species:	Rat	Treatment:	Dexamethasone
Strain:	* IGS, Sprague Dawley	Source:	Sigma (Cat. No. D-1756)
Sex:	Male	Vehicle:	Corn oil
Age:	~8 weeks	Concentration:	10 mg/mL
Vendor:	Charles River, Raleigh, NC	Regimen:	50 mg/kg body weight once per day on days 1-4, livers harvested on day 5

\* International Genetic Standard

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

Food:	Purina 5L79 ( <i>ad libitum</i> )
Water:	Automatic watering system ( <i>ad libitum</i> )
Light/dark cycle:	5:00 am - 5:00 pm, light; 5:00 pm - 5:00 am, dark (12-hour light/dark)
Temperature:	70°F ± 2°F
Humidity:	30-70 %
Bedding:	Beta Chip (hardwood), NEPCO, Warrensburg, NY
Cage:	Polycarbonate Shoebox Cage, conventional cage



## 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.

These data were generated by and are the property of XENOTECH, LLC. These data are not to be reproduced, published or distributed without the express written consent of XENOTECH, LLC.

Datasheet prepared 10 May 12