

R1083 Lot No. 2110170

Sprague Dawley (SD) Rat Liver Microsomes

β -naphthoflavone-treated

Male, Pool of 15

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)	0.931
Cytochrome b ₅ content	(nmol/mg protein)	0.563
NADPH-cytochrome <i>c</i> reductase	(nmol/mg protein/min)	178 ± 17
7-Ethoxyresorufin O-dealkylation	(pmol/mg protein/min)	1810 ± 110

Background: Treatment of male rats with β -naphthoflavone causes a marked induction (>10-fold) of liver microsomal CYP1A levels, which is associated with an increase in 7-ethoxyresorufin O-dealkylation. Liver microsomes from corn oil-treated rats (Cat. No. R1098) were used as a control. The results confirm the anticipated induction of CYP1A activity.

^a 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:	β -naphthoflavone
Strain:	* IGS Sprague Dawley	Source:	Sigma (Cat. No. N3633)
Sex:	Male	Vehicle:	Corn Oil
Age:	~ 8 weeks	Concentration:	20 mg/mL
Vendor:	Charles River, Raleigh, NC	Regimen:	100 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 \geq 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.

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