XenoTech is a premier provider of custom products to over 200 companies worldwide

XenoTech's Custom Products Division has over 15 years of experience preparing hepatocytes and subcellular fractions from a variety of different species. Every year, our dedicated custom products team prepares more than 50 cellular and subcellular products, tailor-made according to our customers' requests. If your ADME research demands quality data from a unique test system, let XenoTech's experienced team prepare your custom product.

Typical Custom Preparations:

- · Fresh animal hepatocytes
- Individual human subcellular fractions (poor & extensive metabolizers, age & race-specific, etc)
- Customized human liver microsome pools (activity, etc)
- · Animal hepatic & extrahepatic subcellular fractions
- Human extrahepatic subcellular fractions
- · Pre-lysate tissue samples
- Fraction preparation from customer provided tissue

Why Choose XenoTech?

- · More than 15 years experience
- · Dedicated custom products department
- · Over 40 characterization assays available
- No minimum set-up fee
- · Validated LC-MS/MS characterization methods
- · Custom-designed preparation methods

Surplus Custom Product Inventory

XenoTech routinely prepares custom batches of hepatic, intestinal, pulmonary, and renal subcellular fractions from various species and strains in accordance with client specifications. We have a surplus inventory of products remaining from these custom preparations. You can find a complete list of surplus inventory on our website at www.xenotechllc.com/Products/Custom-Products.

Assurance of Quality

XenoTech's custom products are manufactured and characterized following the principles of GLP regulations and management-approved standard operating procedures. The product proposal, design, preparation and characterization are managed by a dedicated Senior Production Scientist to ensure the highest of quality for each custom product

Typical Custom Product Timeline

Typical custom preparations vary in time to completion. This variation is caused by a number of factors including how long it takes to receive the specific tissue requested and the number of characterization assays requested. A typical custom product preparation usually takes around 4-12 weeks. Below is an example of a typical timeline.



Timeline represents a typical custom product preparation. Timeline varies based on tissue availability and characterization requested

To get started with your custom product quote, contact us at **info@xenotechllc.com** or call **+913.438.7450** / **877.588.7530** toll-free in North America.

Custom Products At-A-Glance

Species

African Green monkey Marmoset monkey B6C3F1 mouse Fox Chase SCID mouse Mongolian gerbil FVB mouse B6SJLF1 mouse New Zealand rabbit Balb/c mouse GK rat NU/NU nude mouse Beagle dog Goat Ob/ob Lean mouse Golden Syrian hamster Brown Norway rat Ob/ob Obese mouse C57BL/6 mouse Gottingen minipig Owl monkey C57BL/6J mouse Hanford Minipig Pig (standard) Cat Hartley guinea pig Rhesus monkey CD-1 mouse Horse SCID mouse Human (many demographics) Chicken Sheep

Cow Japanese White rabbit Swiss Webster mouse KK.Cg-Ay/J mouse Cynomolgus monkey Trout KK/H1J mouse Db/db Lean mouse Wistar Han rat Db/db Obese mouse Yucatan minipig Lewis rat Fischer 344 rat Long-Evans rat ZDF Lean & Obese rat

Tissues

Adrenal gland Blood Plasma	Eye Heart	Liver Lung	Skin Spleen
Brain	lleum	Muscle	Stomach
Colon	Jejunum	Ovary	Testicle
Duodenum	Kidney	Pancreas	Etc.

Fractions

Cytosol Lysosomes Mitochon Hepatocytes Mast Cells Pre-lysat Homogenate Microsomes S9 fraction

Characterization Assays

Content

Total P450 content by spectral analysis Cytochrome b_s content by spectral analysis NADPH-cytochrome c reductase activity

Cytochrome P450 activity 7-Benzoxyresorufin O-dealkylation 7-Ethoxyresorufin O-dealkylation 7-Methoxyresorufin O-dealkylation 7-Pentoxyresorufin O-dealkylation 7-Ethoxycoumarin O-dealkylation Phenacetin O-dealkylation Coumarin 7-hydroxylation Bupropion hydroxylation Amodiaquine *N*-dealkylation Diclofenac 4'-hydroxylation S-Mephenytoin 4'-hydroxylation Dextromethorphan O-demethylation Chlorzoxazone 6-hydroxylation Ebastine hydroxylation Testosterone 2α-hydroxylation Testosterone 2β-hydroxylation Testosterone 6β-hydroxylation

Testosterone 7α-hydroxylation

Testosterone 15α-hydroxylation

Testosterone 16q-hydroxylation

Cytochrome P450 activity continued...

Testosterone 16β-hydroxylation Midazolam 1'-hydroxylation Lauric acid 12-hydroxylation 4-Nitrophenol hydroxylation Tolbutamide hydroxylation

UDP-Glucuronosyltransferase activity

4-Methylumbelliferone glucuronidation 17β-Estradiol 3-glucuronidation Trifluoperazine glucuronidation 1-Naphthol glucuronidation Propofol glucuronidation Morphine 3-glucuronidation Chenodeoxycholic acid 24-glucuronidation Testosterone 17-glucuronidation $\hbox{7-Hydroxycouma} \bar{\text{rin}} \ glucuron idation$ 7-Hydroxycoumarin sulfonation

Monoamine oxidase activity

5-Hydroxytryptamine oxidation 4 (Dimethylamino)benzylamine oxidation

Carboxylesterase activity

Clopidogrel hydrolysis Methylprednisolone 21-hemisuccinnate hydrolysis

Glutathione S-transferase activity

1-Chloro- 2,4-dinitrobenzene-glutathione conjugation

N-Acetyltransferase activity

p-Aminobenzoic acid acetylation . Sulfamethazine acetylation Dapsone acetylation

Aldehyde Oxidase

Phthalazine oxidation

Lysosomal Enzymes

Acid Phosphatase RNase Cathepsin B

Marker Substrate Enzymatic Fold Induction

CYP1A2 CYP2B6 CYP3A4

Uptake Transporter

OATP1B3 OCT1 NTCP

The list above represents products previously prepared by XenoTech. If you don't see your specific need in the list above, or to get started with your custom product quote, contact us at info@xenotechllc.com or call **913.438.7450**