



XENOTECH
A BioIVT Company

XenoTech's Products - Supporting Preclinical DMPK

Available products by in vitro study type

| Applications | In Vitro Test Systems | | | | | | | | |
|---------------------------|-------------------------------------|----------------------------------|--------------------------------------|---------------|------------------------------|-------------------|----------------------------------|-----------------------------|----------------------|
| | Plateable Cryopreserved Hepatocytes | Pooled Cryopreserved Hepatocytes | Individual Cryopreserved Hepatocytes | Kupffer Cells | Pooled S9/Cytosol/Homogenate | Pooled Microsomes | Individual Microsomes/S9/Cytosol | Recombinant Enzymes (rCYPs) | Lysosomes/Tritosomes |
| Species Differences | + | +++ | ++ | - | ++ | ++ | + | ++ | ++ |
| Metabolic Stability | +++ | +++ | ++ | - | ++ | ++ | + | + | +++ |
| In Vitro Toxicity | ++ | - | - | + | +++ | + | - | - | - |
| Enzyme Induction | +++ | - | - | - | - | - | - | - | - |
| P450 Inhibition | + | ++ | + | - | + | +++ | + | ++ | - |
| Reaction Phenotyping | + | + | + | - | ++ | +++ | + | ++ | - |
| Integrated Metabolism | +++ | +++ | ++ | - | ++ | ++ | + | - | + |
| Uptake Transporter Assays | +++ | +++ | ++ | - | - | - | - | - | - |
| Efflux Transporter Assays | +++ | - | - | - | - | - | - | - | - |
| Genetic Polymorphisms | + | +++ | + | - | - | - | ++ | +++ | - |
| 3D Hepatic Models | ++ | - | ++ | ++ | - | - | - | - | - |

+++ = Preferred/best

++ = Good

+ = Acceptable

- = Not applicable

Order these products online at www.xenotech.com/products or contact a customer service representative at **913.438.7450**



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Available Products by *In Vitro* Study Type

| <i>In Vitro</i> Study Type | Available XenoTech Products |
|---|--|
| Enzyme Induction | Cryoplateable human/animal hepatocytes, <i>CryostaX</i> [™] Plateable Pools, fresh human/animal hepatocytes, Ready-Plate [™] hepatocytes, treated animal liver microsomes |
| Hepatic Uptake | <i>HepatoSure</i> [™] pooled human hepatocytes (n=100) or <i>CryostaX</i> [™] (n=10/20), <i>CryostaX</i> [™] Plateable Pools (n=5/10), cryoplateable human hepatocytes, Transporter certified human hepatocytes |
| Hepatic Efflux | Transporter certified human hepatocytes, <i>CryostaX</i> [™] Plateable Pools, cryoplateable human hepatocytes |
| Enzyme Inhibition | Human liver microsomes: <i>XTreme</i> 200-donor pool Human S9, cytosol: <i>XTreme</i> 200-donor pool Hepatocytes: <i>HepatoSure</i> [™] , <i>CryostaX</i> [™] , cryoplateable human/animal hepatocytes, Ready-Plate [™] hepatocytes Recombinant enzymes: Bactosomes (rCYPs) CYP inhibitors/substrates |
| Metabolic Stability/Clearance | Human liver microsomes, S9: <i>XTreme</i> 200 or 50-donor pool Human liver homogenate Hepatocytes: <i>HepatoSure</i> [™] , <i>CryostaX</i> [™] , <i>CryostaX</i> [™] Plateable Pools, cryoplateable human/animal hepatocytes, Ready-Plate [™] hepatocytes Animal microsomes, S9, extrahepatic subcellular fractions Lysosomes/tritosomes |
| Metabolite Characterization | Human liver microsomes, S9: <i>XTreme</i> 200 or 50-donor pool, human liver homogenate Hepatocytes: <i>HepatoSure</i> [™] , <i>CryostaX</i> [™] , animal cryopreserved/fresh hepatocytes |
| Species Comparison | Human, monkey, dog, minipig, rabbit, guinea pig, hamster, rat, mouse, etc. microsomes, S9, hepatocytes |
| Reaction Phenotyping | Human liver microsomes: <i>XTreme</i> 200 or 50-donor pool, reaction phenotyping kit Hepatocytes: pooled human hepatocytes Bactosomes (rCYPs) |
| Reactive Metabolites | Human liver microsomes, S9: <i>XTreme</i> 200 or 50-donor pool, human liver homogenate Hepatocytes: <i>HepatoSure</i> [™] , <i>CryostaX</i> [™] , human/animal cryopreserved/fresh hepatocytes |
| Lysosomal Trapping | <i>HepatoSure</i> [™] , cryoplateable human hepatocytes, <i>CryostaX</i> [™] Plateable Pools, Fa2N-4 immortalized hepatocytes |
| Kupffer Cell Mediated Toxicity/Macrophage Stimulation | Kupffer cells/Kupffer cell thawing and culture media |
| Polymorphic Enzymes | Geneknown [™] human hepatocytes – CYP2C8, CYP2C9, CYP2C19, CYP2D6, CYP3A5, UGT1A1, OATP1B1 Genotyped human liver microsomes – CYP2C9, CYP2C19, CYP2D6, CYP3A5, UGT1A1, UGT1A9 |
| Gender Differences/ Demographic Differences | Male/female specific lots of liver microsomes, across all species Individual donor human liver microsomes and hepatocytes Ethnic and age specific pools available |
| Enzyme Cofactors | <i>RapidStart</i> [™] NADPH regenerating system |
| Hepatocyte Media | Cryopreservation thawing kits, resuspension medium, culture medium and incubation medium |
| Fresh hepatocytes | Fresh plated human/animal hepatocytes 6, 12, 24, 48 and 96-plate well formats Fresh human/animal suspensions |
| Custom Products | Human/animal cellular and subcellular products, various tissues/organs. By request only. |

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