Best Tools for immunology Research

FMO3 Polyclonal Antibody

Catalog No :	YT5453
Reactivity :	Human;Rat;Mouse;
Applications :	WB;IHC;IF;ELISA
Target :	FMO3
Fields :	>>Taurine and hypotaurine metabolism;>>Drug metabolism - cytochrome P450;>>Metabolic pathways
Gene Name :	FMO3
Protein Name :	Dimethylaniline monooxygenase [N-oxide-forming] 3
Human Gene Id :	2328
Human Swiss Prot No :	P31513
Mouse Swiss Prot No :	P97501
Immunogen :	The antiserum was produced against synthesized peptide derived from the Internal region of human FMO3. AA range:101-150
Specificity :	FMO3 Polyclonal Antibody detects endogenous levels of FMO3 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:20000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 58kD

Cell Pathway : Drug metabolism;

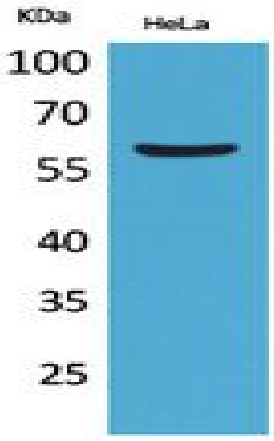
Background : flavin containing monooxygenase 3(FMO3) Homo sapiens Flavin-containing monooxygenases (FMO) are an important class of drug-metabolizing enzymes that catalyze the NADPH-dependent oxygenation of various nitrogen-,sulfur-, and phosphorous-containing xenobiotics such as therapeutic drugs, dietary compounds, pesticides, and other foreign compounds. The human FMO gene family is composed of 5 genes and multiple pseudogenes. FMO members have distinct developmental- and tissue-specific expression patterns. The expression of this FMO3 gene, the major FMO expressed in adult liver, can vary up to 20-fold between individuals. This inter-individual variation in FMO3 expression levels is likely to have significant effects on the rate at which xenobiotics are metabolised and, therefore, is of considerable interest to the pharmaceutical industry. This transmembrane protein localizes to the endoplasmic reticulum of many tissues. Alternative splicing of this gen

Function : catalytic activity:N,N-dimethylaniline + NADPH + O(2) = N,N-dimethylaniline N-oxide + NADP(+) + H(2)O.,cofactor:FAD.,disease:Defects in FMO3 are the cause of trimethylaminuria (TMAU) [MIM:602079]; also known as fish-odor syndrome. TMAU is an inborn error of metabolism associated with an offensive body odor and caused by deficiency of FMO-mediated N-oxidation of amino-trimethylamine (TMA) derived from foodstuffs. Such individuals excrete relatively large amounts of TMA in their urine, sweat, and breath, and exhibit a fishy body odor characteristic of the malodorous free amine.,function:Involved in the oxidative metabolism of a variety of xenobiotics such as drugs and pesticides. It N-oxygenates primary aliphatic alkylamines as well as secondary and tertiary amines. Plays an important role in the metabolism of trimethylamine (TMA), via the production of TMA N-oxide (TMAO). Is also able to

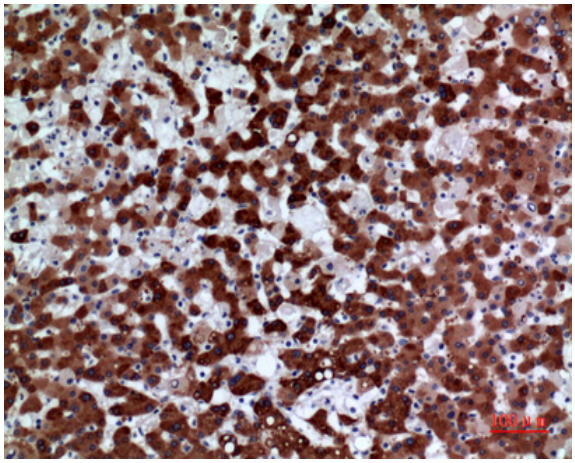
Subcellular Location : Microsome membrane ; Single-pass membrane protein . Endoplasmic reticulum membrane ; Single-pass membrane protein .

Expression : Liver.

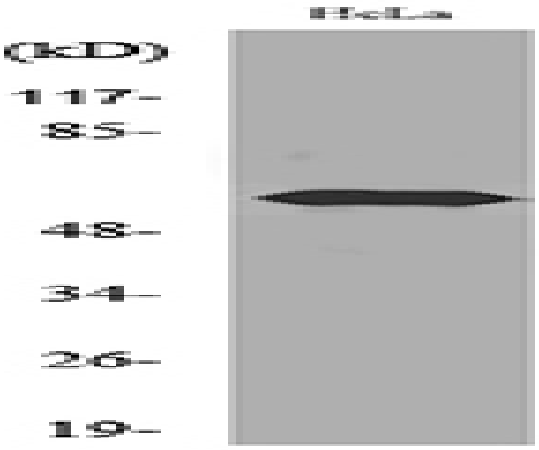
Products Images



Western Blot analysis of HeLa cells using FMO3 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-liver, antibody was diluted at 1:100



Western blot analysis of lysate from HeLa cells, using FMO3 Antibody.