



FMO3 Monoclonal Antibody

Catalog No	YP-mAb-02872
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	FMO3
Protein Name	Dimethylaniline monooxygenase [N-oxide-forming] 3
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human FMO3. AA range:101-150
Specificity	FMO3 Monoclonal Antibody detects endogenous levels of FMO3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	FMO3; Dimethylaniline monooxygenase [N-oxide-forming] 3; Dimethylaniline oxidase 3; FMO II; FMO form 2; Hepatic flavin-containing monooxygenase 3; FMO 3; Trimethylamine monooxygenase
Observed Band	58kD
Cell Pathway	Microsome membrane ; Single-pass membrane protein . Endoplasmic reticulum membrane ; Single-pass membrane protein .
Tissue Specificity	Liver.
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



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 gene

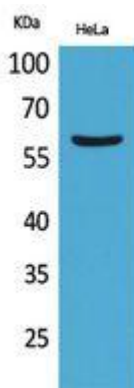
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using FMO3 Monoclonal Antibody