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Anti-FMO5 Antibody

Catalog # ABO11414

Product Information

Application	WB
Primary Accession	P49326
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Dimethylaniline monooxygenase[N-oxide-forming] 5(FMO5) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	2330
Other Names	Dimethylaniline monooxygenase [N-oxide-forming] 5, 1.14.13.8, Dimethylaniline oxidase 5, Hepatic flavin-containing monooxygenase 5, FMO 5, FMO5
Calculated MW	60221
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Microsome membrane. Endoplasmic reticulum membrane.
Tissue Specificity	Expressed in fetal and adult liver.
Source	Eukaryota
Protein Name	Dimethylaniline monooxygenase[N-oxide-forming] 5
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human FMO5(77-90aa DHYPNFMHNAQVLE), different from the related rat sequence by one amino acid, and different from the related mouse sequence by two amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the FMO family.

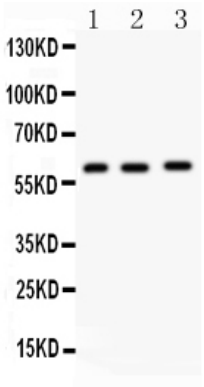
Protein Information

Name	FMO5 (HGNC:3773)
Function	Acts as a Baeyer-Villiger monooxygenase on a broad range of substrates. Catalyzes the insertion of an oxygen atom into a carbon- carbon bond adjacent to a carbonyl, which converts ketones to esters (PubMed:20947616, PubMed:26771671, PubMed:28783300). Active on diverse carbonyl compounds, whereas soft nucleophiles are mostly non- or poorly reactive (PubMed:26771671, PubMed:7872795). In contrast with other forms of FMO it is non- or poorly active on 'classical' substrates such as drugs, pesticides, and dietary components containing soft nucleophilic heteroatoms (Probable) (PubMed:7872795). Able to oxidize drug molecules bearing a carbonyl group on an aliphatic chain, such as nabumetone and pentoxifylline (PubMed:28783300). Also, in the absence of substrates, shows slow but yet significant NADPH oxidase activity (PubMed:26771671). Acts as a positive modulator of cholesterol biosynthesis as well as glucose homeostasis, promoting metabolic aging via pleiotropic effects (By similarity).
Cellular Location	Microsome membrane. Endoplasmic reticulum membrane
Tissue Location	Expressed in fetal and adult liver.

Background

Dimethylaniline monooxygenase[N-oxide-forming] 5 also known as FMO 5 is an enzyme that in humans is encoded by the FMO5 gene. By fluorescence in situ hybridization, this gene was assigned to human chromosome 1q21.1. FMO5 is not an efficient drug-metabolizing enzyme and that it may have an alternative physiologic role. FMO5 transcripts play an important role in progesterone-regulated in breast cancer cells specifically under the control of the progesterone receptor B-isoform.

Images



Anti-FMO5 antibody, ABO11414, Western blottingAll lanes: Anti FMO5 (ABO11414) at 0.5ug/mlLane 1: Mouse Liver Tissue Lysate at 50ugLane 2: Mouse Testis Tissue Lysate at 50ugLane 3: Mouse Spleen Tissue Lysate at 50ugPredicted bind size: 60KDObserved bind size: 60KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.