10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FMO5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20282B

Specification

FMO5 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P49326
Other Accession	NP_001452.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**60221**
Antigen Region	**474-502**

FMO5 Antibody (C-term) - Additional Information

Gene ID 2330

Other Names
Dimethylaniline monooxygenase [N-oxide-forming] 5, Dimethylaniline oxidase 5, Hepatic flavin-containing monooxygenase 5, FMO 5, FMO5

Target/Specificity
This FMO5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 474-502 amino acids from the C-terminal region of human FMO5.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
FMO5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FMO5 Antibody (C-term) - 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

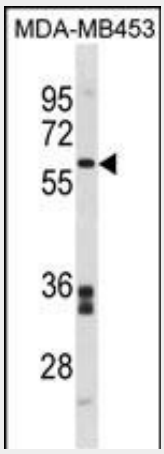
Tissue Location
Expressed in fetal and adult liver.

FMO5 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FMO5 Antibody (C-term) - Images



FMO5 Antibody (C-term) (Cat. #AP20282b) western blot analysis in MDA-MB453 cell line lysates (35ug/lane).This demonstrates the FMO5 antibody detected the FMO5 protein (arrow).

FMO5 Antibody (C-term) - Background

Metabolic N-oxidation of the diet-derived amino-trimethylamine (TMA) is mediated by flavin-containing

monooxygenase and is subject to an inherited FMO3 polymorphism in man resulting in a small subpopulation with reduced TMA N-oxidation capacity resulting in fish odor syndrome Trimethylaminuria. Three forms of the enzyme, FMO1 found in fetal liver, FMO2 found in adult liver, and FMO3 are encoded by genes clustered in the 1q23-q25 region. Flavin-containing monooxygenases are NADPH-dependent flavoenzymes that catalyzes the oxidation of soft nucleophilic heteroatom centers in drugs, pesticides, and xenobiotics. Alternative splicing results in multiple transcript variants.

FMO5 Antibody (C-term) - References

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Ross, C.J., et al. Nat. Genet. 41(12):1345-1349(2009)
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Zhang, J., et al. Drug Metab. Dispos. 34(1):19-26(2006)
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