

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

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:[28783300](#), PubMed:[26771671](#), PubMed:[20947616](#)). 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

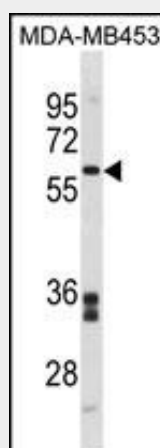
Expressed in fetal and adult liver.

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 Cytometry](#)
- [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

Rose, J. Phd, et al. Mol. Med. (2010) In press :
Ross, C.J., et al. Nat. Genet. 41(12):1345-1349(2009)
Wheeler, H.E., et al. PLoS Genet. 5 (10), E1000685 (2009) :
Zhang, J., et al. Drug Metab. Dispos. 34(1):19-26(2006)
Furnes, B., et al. Drug Metab. Dispos. 31(2):187-193(2003)