

FMO1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP6994c**Specification**

FMO1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q01740](#)**FMO1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 2326**Other Names**

Dimethylaniline monooxygenase [N-oxide-forming] 1, Dimethylaniline oxidase 1, Fetal hepatic flavin-containing monooxygenase 1, FMO 1, FMO1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6994c](/products/AP6994c) was selected from the Center region of human FMO1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FMO1 Antibody (Center) Blocking Peptide - Protein Information**Name** FMO1 ([HGNC:3769](#))**Function**

Broad spectrum monooxygenase that catalyzes the oxygenation of a wide variety of nitrogen- and sulfur-containing compounds including xenobiotics (PubMed: [32156684](http://www.uniprot.org/citations/32156684)). Catalyzes the S-oxygenation of hypotaurine to produce taurine, an organic osmolyte involved in cell volume regulation as well as a variety of cytoprotective and developmental processes (PubMed: [32156684](http://www.uniprot.org/citations/32156684)). In vitro, catalyzes the N- oxygenation of trimethylamine (TMA) to produce trimethylamine N-oxide (TMAO) and could therefore participate to the detoxification of this compound that is generated by the action of gut microbiota from dietary precursors such as choline, choline containing compounds, betaine or L- carnitine (By similarity).

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P36365}; Single-pass membrane protein

Tissue Location

Expressed mainly in fetal and adult liver.

FMO1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

FMO1 Antibody (Center) Blocking Peptide - Images**FMO1 Antibody (Center) Blocking Peptide - 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.

FMO1 Antibody (Center) Blocking Peptide - References

Hines,R.N. et.al., Expert Opin Drug Metab Toxicol 2 (1), 41-49 (2006)