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

FMO3 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP6901a

Specification

FMO3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P31513

FMO3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 2328

Other Names
Dimethylaniline monooxygenase [N-oxide-forming] 3, Dimethylaniline oxidase 3, FMO II, FMO form 2, Hepatic flavin-containing monooxygenase 3, FMO 3, Trimethylamine monooxygenase, FMO3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6901a was selected from the N-term region of human FMO3. 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.

FMO3 Antibody (N-term) Blocking Peptide - Protein Information

Name FMO3

Function
Essential hepatic enzyme that catalyzes the oxygenation of a wide variety of nitrogen- and sulfur-containing compounds including drugs as well as dietary compounds (PubMed:10759686, PubMed:30381441, PubMed:32156684). Plays an important role in the metabolism of trimethylamine (TMA), via the production of trimethylamine N-oxide (TMAO) metabolite (PubMed:9776311). TMA is generated by the action of gut microbiota using dietary precursors such as choline, choline containing compounds, betaine or L-carnitine. By regulating TMAO concentration, FMO3 directly impacts both platelet responsiveness and rate of thrombus formation (PubMed:<a href="http://www.uniprot.org/citations/29981269"

target="_blank">29981269).

Cellular Location
Microsome membrane {ECO:0000250|UniProtKB:P32417}; Single-pass membrane protein. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P32417}; Single-pass membrane protein

Tissue Location
Liver.

FMO3 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

FMO3 Antibody (N-term) Blocking Peptide - Images

FMO3 Antibody (N-term) Blocking Peptide - Background

FMO3 is 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. It plays an important role in the metabolism of trimethylamine (TMA), via the production of TMA N-oxide (TMAO). Is also able to perform S-oxidation when acting on sulfide compounds.

FMO3 Antibody (N-term) Blocking Peptide - References

Allerston,C.K., et.al., Mol. Genet. Metab. 98 (1-2), 198-202 (2009)