

## 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 <a href=/products/AP6901a>AP6901a</a> 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:<a href="http://www.uniprot.org/citations/10759686" target="\_blank">10759686</a>, PubMed:<a href="http://www.uniprot.org/citations/30381441" target="\_blank">30381441</a>, PubMed:<a href="http://www.uniprot.org/citations/32156684" target="\_blank">32156684</a>). Plays an important role in the metabolism of trimethylamine (TMA), via the production of trimethylamine N-oxide (TMAO) metabolite (PubMed:<a href="http://www.uniprot.org/citations/9776311" target="\_blank">9776311</a>). 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</a>).

### **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)