

### **Anti-FMO3 Picoband Antibody**

**Catalog # ABO12276** 

# **Specification**

## **Anti-FMO3 Picoband Antibody - Product Information**

Application WB
Primary Accession P31513
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Dimethylaniline monooxygenase [N-oxide-forming] 3(FMO3) detection. Tested with WB in Human; Mouse; Rat. < br>

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-FMO3 Picoband Antibody - Additional Information**

#### **Gene ID 2328**

#### **Other Names**

Dimethylaniline monooxygenase [N-oxide-forming] 3, 1.14.13.8, Dimethylaniline oxidase 3, FMO II, FMO form 2, Hepatic flavin-containing monooxygenase 3, FMO 3, Trimethylamine monooxygenase, 1.14.13.148. FMO3

# Calculated MW 60033 MW KDa

## **Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br/>br>

#### **Subcellular Localization**

Microsome membrane. Endoplasmic reticulum membrane.

#### **Tissue Specificity**

Liver.

#### **Protein Name**

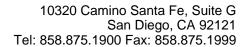
Dimethylaniline monooxygenase [N-oxide-forming] 3

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human FMO3 (404-433aa DMMNDINEKMEKKRKWFGKSETIQTDYIVY), different from the related mouse sequence by eight amino acids, and from the related rat sequence by six amino acids.





Purification Immunogen affinity purified.

**Cross Reactivity**No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**Belongs to the FMO family.

## **Anti-FMO3 Picoband Antibody - 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> (PubMed:<a href="http://www.uniprot.org/citations/9776311" target="\_blank">9776311</a> (PubMed:<a href="http://www.uniprot.org/citations/9776311" target="\_blank">9776311</a> (PubMed:<a href="http://www.uniprot.org/citations/9776311" target="\_blank">9776311</a> (PubMed:<a href="http://www.uniprot.org/citations/9981269" target="\_blank">9776311</a> (PubMed:<a href="http://www.uniprot.org/citations/29981269" target="\_blank">9776311</a> (PubMed:<a href="http://www.uniprot.org/citations/29981269") target="\_blank">9776311</a> (PubMed:<a href="http://www.uniprot.org/citations/29981269") target="\_blank">9776311</a> (PubMed:<a href="http://www.uniprot.org/citations/29981269") target="\_blank">9776311</a> (PubMed:<a href="http://www.uniprot.org/citations/29981269") target="\_blank">

#### **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.

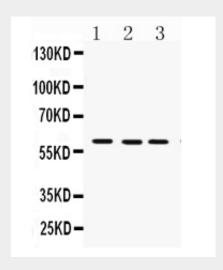
#### **Anti-FMO3 Picoband Antibody - Protocols**

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

# **Anti-FMO3 Picoband Antibody - Images**





Anti- FMO3 Picoband antibody, ABO12276, Western blottingAll lanes: Anti FMO3 (ABO12276) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Mouse Liver Tissue Lysate at 50ugLane 3: SMMC Whole Cell Lysate at 40ugPredicted bind size: 60KDObserved bind size: 60KD

## **Anti-FMO3 Picoband Antibody - Background**

FMO3 (Flavin-containing Monooxygenase 3) is an enzyme that in humans is encoded by the FMO3 gene. The mammalian flavin-containing monooxygenases (FMO) represent a multigene family whose gene products are localized in the endoplasmic reticulum of many tissues. The FMO3 gene contains 1 noncoding and 8 coding exons. And the FMO3 gene is mapped on 1q24.3. Using quantitative RNase protection assays, FMO3 is present in low abundance in fetal liver and lung and in adult kidney and lung, and in much greater abundance in adult liver. By Western blot analysis of human liver microsomal samples ranging from 8 weeks gestation to 18 years of age, FMO1 is the major fetal isoform and FMO3 is the major adult isoform. FMO3 was expressed at intermediate levels until 11 years of age when a gender-independent increase in FMO3 expression was observed during puberty. Sufferers of trimethylaminuria may display a reduced ability to metabolize substrates for FMO3 such as nicotine. FMO3 metabolizes a number of drugs, including amphetamine, clozapine, deprenyl, metamphetamine, tamoxifen, ethionamide, thiacetazone, and sulindac sulfide.