

Anti-FMO2 Picoband Antibody
Catalog # ABO12446**Specification**

Anti-FMO2 Picoband Antibody - Product Information

Application	WB
Primary Accession	Q99518
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Dimethylaniline monooxygenase [N-oxide-forming] 2(FMO2) detection. Tested with WB in Human.

Reconstitution

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

Anti-FMO2 Picoband Antibody - Additional Information

Gene ID 2327

Other Names

Dimethylaniline monooxygenase [N-oxide-forming] 2, 1.14.13.8, Dimethylaniline oxidase 2, FMO 1B1, Pulmonary flavin-containing monooxygenase 2, FMO 2, FMO2

Calculated MW

53644 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Microsome membrane. Endoplasmic reticulum membrane.

Tissue Specificity

Expressed in lung (at protein level). Expressed predominantly in lung, and at a much lesser extent in kidney. Also expressed in fetal lung, but not in liver, kidney and brain. .

Protein Name

Dimethylaniline monooxygenase [N-oxide-forming] 2

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 N-terminus of human FMO2 (78-115aa FPNFLHNSKLLLEYFRIFAKKFDLLKYIQFQTTVLSVRK), different from the related mouse and rat sequences by two amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After reconstitution, 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.

Anti-FMO2 Picoband Antibody - Protein Information

Name FMO2 ([HGNC:3770](#))

Function

Catalyzes the oxidative metabolism of numerous xenobiotics, including mainly therapeutic drugs and insecticides that contain a soft nucleophile, most commonly nitrogen and sulfur and participates to their bioactivation (PubMed: [9804831](http://www.uniprot.org/citations/9804831), PubMed: [15294458](http://www.uniprot.org/citations/15294458), PubMed: [15144220](http://www.uniprot.org/citations/15144220), PubMed: [18948378](http://www.uniprot.org/citations/18948378), PubMed: [18930751](http://www.uniprot.org/citations/18930751)). Specifically catalyzes S-oxygenation of sulfur derived compounds such as thioureas-derived compounds, thioetherorganophosphates to their sulfinic acid (PubMed: [9804831](http://www.uniprot.org/citations/9804831), PubMed: [15144220](http://www.uniprot.org/citations/15144220), PubMed: [18948378](http://www.uniprot.org/citations/18948378), PubMed: [18930751](http://www.uniprot.org/citations/18930751)). In vitro, catalyzes S-oxygenation of the second-line antitubercular drugs thiacetazone (TAZ) and ethionamide (ETA), forming a sulfinic acid and a carbodiimide via a postulated sulfinic acid intermediate (PubMed: [18948378](http://www.uniprot.org/citations/18948378), PubMed: [18930751](http://www.uniprot.org/citations/18930751)). Also catalyzes S-oxygenation of the thioether-containing organophosphate insecticides, phorate and disulfoton (PubMed: [15294458](http://www.uniprot.org/citations/15294458)).

Cellular Location

Microsome membrane {ECO:0000250|UniProtKB:P17635}; Single-pass membrane protein. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P17635}; Single-pass membrane protein

Tissue Location

Expressed in lung (at protein level). Expressed predominantly in lung, and at a much lesser extent in kidney. Also expressed in fetal lung, but not in liver, kidney and brain

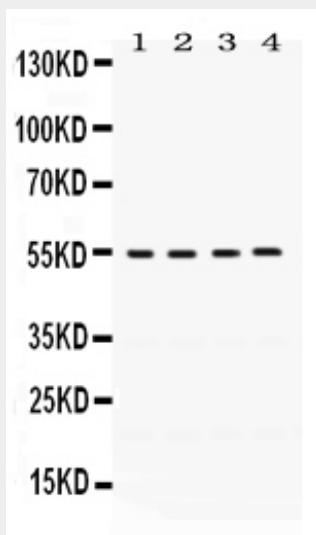
Anti-FMO2 Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-FMO2 Picoband Antibody - Images



Anti- FMO2 Picoband antibody, ABO12446, Western blotting All lanes: Anti FMO2 (ABO12446) at 0.5ug/ml
Lane 1: A549 Whole Cell Lysate at 40ug
Lane 2: HELA Whole Cell Lysate at 40ug
Lane 3: MCF-7 Whole Cell Lysate at 40ug
Lane 4: SW620 Whole Cell Lysate at 40ug
Predicted bind size: 54KD
Observed bind size: 54KD

Anti-FMO2 Picoband Antibody - Background

Dimethylaniline monooxygenase [N-oxide-forming] 2 is an enzyme that in humans is encoded by the FMO2 gene. This gene encodes a flavin-containing monooxygenase family member. It is an NADPH-dependent enzyme that catalyzes the N-oxidation of some primary alkylamines through an N-hydroxylamine intermediate. However, some human populations contain an allele (FMO2*2A) with a premature stop codon, resulting in a protein that is C-terminally-truncated, has no catalytic activity, and is likely degraded rapidly. This gene is found in a cluster with other related family members on chromosome 1. Alternative splicing results in multiple transcript variants.