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Anti-FMO2 Picoband Antibody

Catalog # ABO12446

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.

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	60907
Application Details	Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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 FPNFLHNSKLLEYFRIFAKKFDLLKYIQFQTTVLSVRK), 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 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.

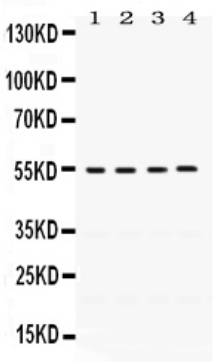
Protein Information

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:15144220, PubMed:15294458, PubMed:18930751, PubMed:18948378, PubMed:9804831). Specifically catalyzes S-oxygenation of sulfur derived compounds such as thioureas-derived compounds, thioetherorganophosphates to their sulfenic acid (PubMed:15144220, PubMed:9804831). 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 sulfenic acid intermediate (PubMed:18930751, PubMed:18948378). Also catalyzes S- oxygenation of the thioether-containing organophosphate insecticides, phorate and disulfoton (PubMed: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

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.

Images



Anti- FMO2 Picoband antibody, ABO12446, Western blottingAll lanes: Anti FMO2 (ABO12446) at 0.5ug/mlLane 1: A549 Whole Cell Lysate at 40ugLane 2: HELA Whole Cell Lysate at 40ugLane 3: MCF-7 Whole Cell Lysate at 40ugLane 4: SW620 Whole Cell Lysate at 40ugPredicted bind size: 54KDObserved bind size: 54KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.