

Anti-CYP2E1 Picoband Antibody
Catalog # ABO11881**Specification**

Anti-CYP2E1 Picoband Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P05181
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Cytochrome P450 2E1(CYP2E1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

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

Anti-CYP2E1 Picoband Antibody - Additional Information

Gene ID 1571

Other Names

Cytochrome P450 2E1, 1.14.13.-, 4-nitrophenol 2-hydroxylase, 1.14.13.n7, CYP11E1, Cytochrome P450-J, Cytochrome P450 2E1, N-terminally processed, CYP2E1, CYP2E

Calculated MW

56849 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein.

Protein Name

Cytochrome P450 2E1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

E.coli-derived human CYP2E1 recombinant protein (Position: M1-Y310). Human CYP2E1 shares 73% and 74% amino acid (aa) sequences identity with mouse and rat CYP2E1, respectively.

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.

Sequence Similarities

Belongs to the cytochrome P450 family.

Anti-CYP2E1 Picoband Antibody - Protein Information

Name CYP2E1 {ECO:0000303|PubMed:10553002, ECO:0000312|HGNC:HGNC:2631}

Function

A cytochrome P450 monooxygenase involved in the metabolism of fatty acids (PubMed:10553002, PubMed:18577768). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH--hemoprotein reductase) (PubMed:10553002, PubMed:18577768). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates fatty acids specifically at the omega-1 position displaying the highest catalytic activity for saturated fatty acids (PubMed:10553002, PubMed:18577768). May be involved in the oxidative metabolism of xenobiotics (Probable).

Cellular Location

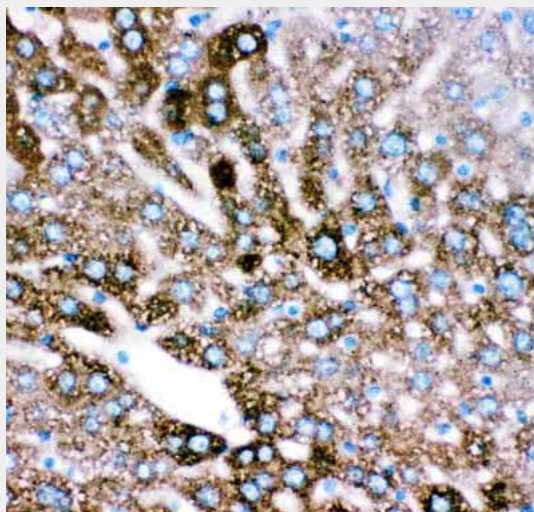
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P05182}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05182}. Microsome membrane {ECO:0000250|UniProtKB:P05182}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05182}. Mitochondrion inner membrane {ECO:0000250|UniProtKB:P05182}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05182}. Note=Post-translationally targeted to mitochondria. TOMM70 is required for the translocation across the mitochondrial outer membrane. After translocation into the matrix, associates with the inner membrane as a membrane extrinsic protein {ECO:0000250|UniProtKB:P05182}

Anti-CYP2E1 Picoband Antibody - Protocols

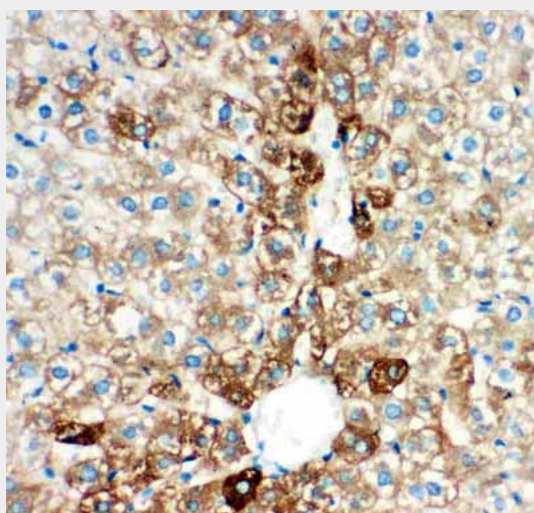
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CYP2E1 Picoband Antibody - Images



Anti- CYP2E1 antibody, ABO11881, IHC(P)IHC(P): Mouse Liver Tissue



Anti- CYP2E1 antibody, ABO11881, IHC(P)IHC(P): Rat Liver Tissue

Anti-CYP2E1 Picoband Antibody - Background

Cytochrome P450 2E1 (abbreviated CYP2E1), a member of the cytochrome P450 mixed-function oxidase system, is involved in the metabolism of xenobiotics in the body. In humans, the CYP2E1 enzyme is encoded by the CYP2E1 gene. It is mapped to 10q26.3. While it is involved in the oxidative metabolism of a small range of substrates (mostly small polar molecules), there are many important drug interactions mediated by CYP2E1. Most drugs undergo deactivation by CYP2E1, either directly or by facilitated excretion from the body. Also, many substances are bioactivated by CYP2E1 to form their active compounds. In addition, CYP2E1 is an important enzyme for the conversion of ethanol to acetaldehyde and to acetate in humans. In the conversion sequence of acetyl-CoA to glucose, CYP2E1 transforms acetone via acetol into propylene glycol and methylglyoxal, the precursors of pyruvate, acetate and lactate.