

## CYP2E1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21764c

### Specification

# **CYP2E1 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<u>P05181</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	56849

## CYP2E1 Antibody (Center) - Additional Information

### Gene ID 1571

**Other Names** Cytochrome P450 2E1, 11413-, 4-nitrophenol 2-hydroxylase, 11413n7, CYPIIE1, Cytochrome P450-J, Cytochrome P450 2E1, N-terminally processed, CYP2E1, CYP2E

Target/Specificity

This CYP2E1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 166-198 amino acids from the Central region of human CYP2E1.

**Dilution** WB~~1:2000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** CYP2E1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# CYP2E1 Antibody (Center) - 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:<u>10553002</u>, PubMed:<u>18577768</u>). 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:<u>10553002</u>, PubMed:<u>18577768</u>). 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:<u>10553002</u>, PubMed:<u>18577768</u>). May be involved in the oxidative metabolism of xenobiotics (Probable).

#### **Cellular Location**

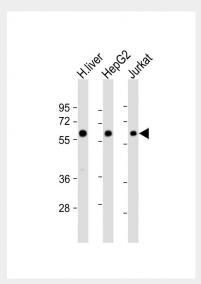
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P05182}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05182}. Microsome membrane {ECO:0000250|UniProtKB:P05182}; Peripheral membrane protein {ECO:0000250|UniProtKB:P05182}. Mitochondrion inner membrane {ECO:0000250|UniProtKB:P05182}; Peripheral 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}

## **CYP2E1 Antibody (Center) - Protocols**

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

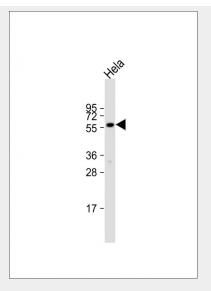
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## CYP2E1 Antibody (Center) - Images



All lanes : Anti-CYP2E1 Antibody (Center) at 1:4000 dilution Lane 1: human liver lysate Lane 2: HepG2 whole cell lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 57 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Anti-CYP2E1 Antibody (Center) at 1:2000 dilution + Hela whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 57 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# CYP2E1 Antibody (Center) - Background

Metabolizes several precarcinogens, drugs, and solvents to reactive metabolites. Inactivates a number of drugs and xenobiotics and also bioactivates many xenobiotic substrates to their hepatotoxic or carcinogenic forms.

# **CYP2E1 Antibody (Center) - References**

Song B.-J.,et al.J. Biol. Chem. 261:16689-16697(1986). Umeno M.,et al.Biochemistry 27:9006-9013(1988). Zhuge J.,et al.Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases. Deloukas P.,et al.Nature 429:375-381(2004). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.