

Cytochrome P450 2E1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51692

Product Information

Application	WB, ICC
Primary Accession	P05181
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56849

Additional Information

Gene ID	1571
Other Names	Cytochrome P450 2E1, 11413-, 4-nitrophenol 2-hydroxylase, 11413n7, CYP11E1, Cytochrome P450-J, Cytochrome P450 2E1, N-terminally processed, CYP2E1, CYP2E
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Cytochrome P450 2E1. The exact sequence is proprietary.
Dilution	WB~~1:1000 ICC~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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}

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.

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.

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