

Anti-CYP2E1 Antibody

Catalog # ABO11213

Product Information

Application	WB, IHC-P
Primary Accession	Q05421
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Cytochrome P450 2E1(CYP2E1) detection. Tested with WB, IHC-P in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	13106
Other Names	Cytochrome P450 2E1, 1.14.13.-, 4-nitrophenol 2-hydroxylase, 1.14.13.n7, CYP11E1, Cytochrome P450-ALC, Cytochrome P450-J, Cyp2e1, Cyp2e, Cyp2e-1
Calculated MW	56805
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Mouse, Rat
Subcellular Localization	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein.
Tissue Specificity	Highest level in the liver and to a lesser extent in the kidney, with a higher level in the male kidney than in the female.
Source	Eukaryota
Protein Name	Cytochrome P450 2E1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of mouse CYP2E1 (94-112aa KNEFSGRGDIPVFQEYKNK), identical to the related rat sequence.
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

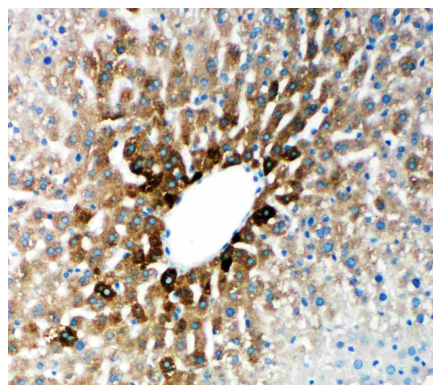
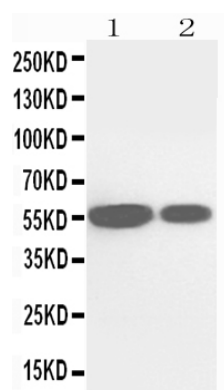
Name	Cyp2e1
Synonyms	Cyp2e, Cyp2e-1
Function	A cytochrome P450 monooxygenase involved in the metabolism of fatty acids. Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH--hemoprotein reductase). 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. May be involved in the oxidative metabolism of xenobiotics.
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}
Tissue Location	Highest level in the liver and to a lesser extent in the kidney, with a higher level in the male kidney than in the female

Background

CYP2E1, also known as P450IIE1, is a member of the P450IIE subfamily which is ethanol-inducible. It has at least 1 gene which is mapped to 10q24.3-qter, and a second is likely in rat and in man. Both the rat and human proteins encoded by this gene contain 493 amino acids and calculated molecular masses of 56,634 and 56,916 daltons, respectively. In addition, genetic polymorphisms in the 5-prime flanking region of the human P450IIE1 gene affected its binding of transacting factor and changed its transcriptional regulation, which may lead to interindividual differences of microsomal drug oxidation activity. P450IIE1 is an important enzyme for the catalysis of the conversion of ethanol to acetaldehyde and to acetate in humans, and it is also involved in the metabolism of nitrosamines. Due to the possible correlation of P450IIE1 genes with malignancy, clinical studies of RFLP patterns of these genes in cancer may be useful.

Images

Anti-CYP2E1 antibody, ABO11213, Western blotting
Lane 1: Rat Liver Tissue Lysate
Lane 2: Mouse Liver Tissue Lysate



Anti-CYP2E1 antibody, ABO11213, IHC(P)IHC(P): Rat Liver Tissue

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