

CYP2E1 Polyclonal Antibody

Catalog # AP69403

Product Information

| Application | WB, IHC-P, IF |
|-------------------|-------------------|
| Primary Accession | <u>P05181</u> |
| Reactivity | Human, Mouse, Rat |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 56849 |

Additional Information

| Gene ID | 1571 |
|--------------------|---|
| Other Names | CYP2E1; CYP2E; Cytochrome P450 2E1; 4-nitrophenol 2-hydroxylase; CYPIIE1; Cytochrome P450-J |
| Dilution | WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 |
| Format | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| Storage Conditions | -20°C |

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 (NADPHhemoprotein 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}

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.

Images



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