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Cytochrome P450 2A6 Rabbit pAb

Catalog # AP98571

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P11509
Other Accession	P11509
Predicted	Rat, Human, Mouse, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56517
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CYP2A/Cytochrome P450 2A6
Epitope Specificity	388-494/494
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the cytochrome P450 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	P450 enzymes constitute a family of monooxygenase enzymes that are involved in the metabolism of a wide array of endogenous and xenobiotic compounds (1). Several P450 enzymes have been classified by sequence similarities as members of the CYP1A and CYP2A subfamilies (2). NADPH cytochrome P450 reductase is a microsomal enzyme responsible for the transfer of electrons from NADPH to cytochrome P450 enzymes during the P450 catalytic cycle (3,4). NADPH cytochrome P450 reductase is localized to the endoplasmic reticulum where it is also able to transfer electrons to heme oxygenase and cytochrome b5 (5,6). NADPH cytochrome P450 reductase is structurally related to two separate flavoprotein families, ferredoxin nucleotide reductase (FNR) and flavodoxin (7). Electron transfer of NADPH cytochrome P450 reductase requires the binding of two flavin cofactors, FAD and FMN, to the FNR and flavodoxin domains, respectively (8).

Additional Information

Gene ID	1548
Other Names	CP2A6_HUMAN; CYP2A6; 1, 4-cineole 2-exo-monooxygenase; CYPIIA6; Coumarin 7-hydroxylase; Cytochrome P450 IIA3; Cytochrome P450(I); 1.14.14.-; CYP2A3; cytochrome P450 family 2 subfamily A member 6; cytochrome P450, subfamily IIA (phenobarbital-inducible), polypeptide 6; cytochrome P450, family 2, subfamily A, polypeptide 6
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CYP2A6
Synonyms	CYP2A3
Function	Exhibits a high coumarin 7-hydroxylase activity. Can act in the hydroxylation of the anti-cancer drugs cyclophosphamide, ifosphamide and tegafur. Competent in the metabolic activation of aflatoxin B1. Constitutes the major nicotine C-oxidase. Acts as a 1,4- cineole 2-exo-monooxygenase. Possesses low phenacetin O-deethylation activity.
Cellular Location	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein
Tissue Location	Liver.

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