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CYP4B1 Rabbit pAb

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Catalog # AP55440

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P13584
Predicted	Rat, Pig, Dog, Human, Mouse, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58991
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CYP4B1
Epitope Specificity	51-150/511
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Endoplasmic reticulum membrane. Microsome membrane.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum. In rodents, the homologous protein has been shown to metabolize certain carcinogens; however, the specific function of the human protein has not been determined. Two transcript variants encoding slightly different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	1580
Other Names	Cytochrome P450 4B1, 1.14.14.1, CYPIVB1, Cytochrome P450-HP, CYP4B1
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	CYP4B1 (HGNC:2644)
Function	Catalyzes the omega- and (omega-1)-hydroxylation of saturated fatty acids and n-alkanes (By similarity). Also bioactivates xenobiotics such as the procarcinogen 3-methoxy-4-aminoazobenzene and the cyclic arylamines 2-aminofluorene and 2-aminoanthracene (By similarity). In addition, catalyzes O-dealkylation of 7-ethoxycoumarin (By similarity). Functions at the interface of xenobiotic and endobiotic metabolism, contributing both to fatty acid and hydrocarbon oxidation and to the bioactivation of diverse xenobiotics. Preferentially hydroxylates the terminal carbon (omega-hydroxylation) of medium-chain fatty acids (C8-C10), with regioselectivity decreasing as chain length increases. C8 fatty acids and C7 n-alkanes display optimal chain length for regioselective omega-hydroxylation, and n- alkanes (C7-C10) are generally turned over faster and with higher regioselectivity than the corresponding fatty acids. In addition to omega/omega-1 hydroxylation, also catalyzes alpha-, beta-, gamma- and delta-hydroxylation of mid-chain length fatty acids, whereas fatty alcohols of the same chain length are almost exclusively hydroxylated at the omega, omega-1 and omega-2 positions (By similarity).
Cellular Location	Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P15128}; Peripheral membrane protein {ECO:0000250|UniProtKB:P15128}. Microsome membrane {ECO:0000250|UniProtKB:P15128}; Peripheral membrane protein {ECO:0000250|UniProtKB:P15128}
Tissue Location	Detected in the liver and lung (at protein level).

Background

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