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CYP2S1 Rabbit pAb

Catalog # AP100233

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q96SQ9
Other Accession	Q96SQ9
Reactivity	Human
Predicted	Rat, Mouse, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55817
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CYP2S1
Epitope Specificity	21-120/504
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	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. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	29785
Other Names	CP2S1_HUMAN; CYP2S1; CYPIIS1; Hydroperoxy icosatetraenoate dehydratase; Thromboxane-A synthase; 1.14.14.-; CP2S1_MOUSE; cytochrome P450 family 2 subfamily S member 1; cytochrome P450, subfamily IIS, polypeptide 1; cytochrome P450, family 2, subfamily S, polypeptide 1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	CYP2S1 {ECO:0000303|PubMed:11181079, ECO:0000312|HGNC:HGNC:15654}
Function	A cytochrome P450 monooxygenase involved in the metabolism of retinoids and eicosanoids (PubMed:12711469, PubMed:21068195). In epidermis, may contribute to the oxidative metabolism of all-trans- retinoic acid. For this activity, 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:12711469). Additionally, displays peroxidase and isomerase activities toward various oxygenated eicosanoids such as prostaglandin H2 (PGH2) and hydroperoxyeicosatetraenoates (HPETEs) (PubMed:21068195). Independently of cytochrome P450 reductase, NADPH, and O2, catalyzes the breakdown of PGH2 to hydroxyheptadecatrienoic acid (HHT) and malondialdehyde (MDA), which is known to act as a mediator of DNA damage (PubMed:21068195).
Cellular Location	Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein
Tissue Location	Expressed at higher levels in extrahepatic tissues including trachea, lung, stomach, small intestine, colon, kidney, breast, placenta and spleen (PubMed:11181079, PubMed:12711469) Expressed in peripheral blood leukocytes (PubMed:11181079) Constitutively expressed in skin (at protein level) (PubMed:12711469)

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