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CYP4F3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8646a

Product Information

Application	WB, FC, E
Primary Accession	Q08477
Reactivity	Human
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16496
Calculated MW	59847
Antigen Region	77-109

Additional Information

Gene ID	4051
Other Names	Docosahexaenoic acid omega-hydroxylase CYP4F3, 20-hydroxyeicosatetraenoic acid synthase, 20-HETE synthase, 11413-, CYPIVF3, Cytochrome P450 4F3, Cytochrome P450-LTB-omega, Leukotriene-B(4) 20-monooxygenase 2, Leukotriene-B(4) omega-hydroxylase 2, CYP4F3, LTB4H
Target/Specificity	This CYP4F3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 77-109 amino acids from the N-terminal region of human CYP4F3.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CYP4F3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CYP4F3 {ECO:0000303|PubMed:9539102, ECO:0000312|HGNC:HGNC:2646}

Function	A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids and their oxygenated derivatives (oxylipins) (PubMed:11461919, PubMed:15145985, PubMed:16547005, PubMed:16820285, PubMed:18065749, PubMed:18182499, PubMed:18577768, PubMed:8486631, PubMed:9675028). 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 (CPR; NADPH-ferrihemoprotein reductase) (PubMed:9675028). May play a role in inactivation of pro-inflammatory and anti-inflammatory oxylipins during the resolution of inflammation (PubMed:11461919, PubMed:15145985, PubMed:15364545, PubMed:16547005, PubMed:16820285, PubMed:18065749, PubMed:18182499, PubMed:18577768, PubMed:8486631, PubMed:9675028).
Cellular Location	Endoplasmic reticulum membrane; Single-pass membrane protein. Microsome membrane; Single-pass membrane protein
Tissue Location	[Isoform CYP4F3A]: Selectively expressed in blood neutrophils and bone marrow cells. Coexpressed with CYP4F3B in prostate, ileum and trachea.

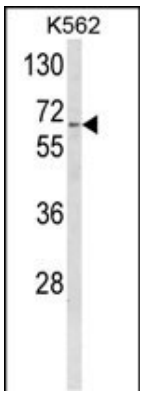
Background

CYP4F3 is 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. The enzyme starts the process of inactivating and degrading leukotriene B4, a potent mediator of inflammation.

References

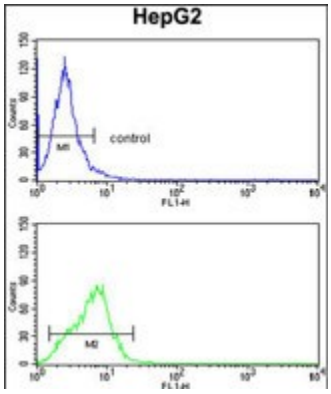
Kikuta,Y., et.al., FEBS Lett. 348 (1), 70-74 (1994)
Kikuta,Y., et,al., DNA Cell Biol. 17 (3), 221-230 (1998)

Images



Western blot analysis of CYP4F3 Antibody (N-term) (Cat. #AP8646a) in K562 cell line lysates (35ug/lane). CYP4F3 (arrow) was detected using the purified Pab.

CYP4F3 Antibody (N-term) (Cat.#AP8646a) flow cytometry analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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