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CYPIVF8 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55444

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	P98187
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59995

Additional Information

Gene ID	11283
Other Names	Cytochrome P450 4F8, 1.14.14.1, CYPIVF8, CYP4F8 {ECO:0000303|PubMed:10791960, ECO:0000312|HGNC:HGNC:2648}
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	CYP4F8 {ECO:0000303|PubMed:10791960, ECO:0000312|HGNC:HGNC:2648}
Function	A cytochrome P450 monooxygenase involved in the metabolism of endogenous polyunsaturated fatty acids (PUFAs) and their oxygenated derivatives (oxylipins). 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). Catalyzes the hydroxylation of carbon hydrogen bonds, with preference for omega-1 and omega-2 positions (PubMed:10791960, PubMed:15789615, PubMed:16112640). Hydroxylates (5Z,8Z,11Z,14Z)-eicosatetraenoic acid (arachidonate) predominantly at omega-2 position to form (18R)- hydroxyeicosatetraenoic acid (18R-HETE) (PubMed:10791960). Exhibits omega-1 hydroxylase activity toward prostaglandin (PG) H1, PGH2 and PGI2 (PubMed:10791960, PubMed:15789615). Catalyzes the epoxidation of double bonds of PUFAs, including docosahexaenoic and docosapentaenoic acids (PubMed:16112640). Shows little activity against PGD2, PGE1, PGE2, PGF2alpha, and leukotriene B4.

Cellular Location	Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9HBI6}; Single-pass membrane protein {ECO:0000250|UniProtKB:Q9HBI6}. Microsome membrane {ECO:0000250|UniProtKB:Q9HBI6}; Single-pass membrane protein {ECO:0000250|UniProtKB:Q9HBI6}
Tissue Location	Expressed in the epithelium of seminal vesicles, in renal cortex, in adult and fetal liver, in epidermis, in corneal epithelium, in sweat glands, hair follicles, epithelial linings of the ampulla of vas deferens and of the stomach and small intestine, as well as in the transitional epithelium of the bladder and ureter (at protein level). In the epidermis, expressed from the basal cell to the granular cell layers. In the corneal epithelium, expressed in all cell layers Also detected in prostate. Up-regulated in the epidermis of psoriatic lesions.