

### CYP4F8 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7890b

### Specification

## CYP4F8 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>P98187</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	59995
Antigen Region	473-503

### CYP4F8 Antibody (C-term) - Additional Information

Gene ID 11283

Other Names Cytochrome P450 4F8, CYPIVF8, CYP4F8

#### Target/Specificity

This CYP4F8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 473-503 amino acids from the C-terminal region of human CYP4F8.

Dilution WB~~1:1000

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

CYP4F8 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### CYP4F8 Antibody (C-term) - 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:<u>10791960</u>, PubMed:<u>16112640</u>, PubMed:<u>15789615</u>). Hydroxylates (5Z,8Z,11Z,14Z)-eicosatetraenoic acid (arachidonate) predominantly at omega-2 position to form (18R)- hydroxyeicosatetraenoic acid (18R-HETE) (PubMed:<u>10791960</u>). Exhibits omega-1 hydroxylase activity toward prostaglandin (PG) H1, PGH2 and PGI2 (PubMed:<u>10791960</u>, PubMed:<u>15789615</u>). Catalyzes the epoxidation of double bonds of PUFAs, including docosahexaenoic and docosapentaenoic acids (PubMed:<u>16112640</u>). 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.

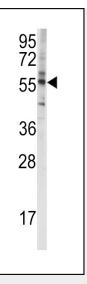
### CYP4F8 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CYP4F8 Antibody (C-term) - Images





Western blot analysis of anti-CYP4F8 Antibody (C-term)(Cat.#AP7890b) in K562 cell line lysates (35ug/lane). CYP4F8(arrow) was detected using the purified Pab.

# CYP4F8 Antibody (C-term) - Background

CYP4F8 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 and functions as a 19-hydroxylase of prostaglandins in seminal vesicles.

### CYP4F8 Antibody (C-term) - References

Bylund J., Finnstroem N., Biophys. Res. Commun. 261:169-174(1999) Bylund J., Hidestrand M.,J. Biol. Chem. 275:21844-21849(2000) Stark K., Toermae H.,Arch. Biochem. Biophys. 409:188-196(2003) Stark K., Bylund J.,Prostaglandins Other Lipid Mediat. 75:47-64(2005)