

CYP4F2 antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI15007**Specification****CYP4F2 antibody - C-terminal region - Product Information**

Application	WB
Primary Accession	P78329
Other Accession	NM_001082 , NP_001073
Reactivity	Human, Mouse, Rat, Rabbit, Goat, Sheep, Horse, Bovine, Guinea Pig, Dog
Predicted Host	Human, Pig, Sheep, Bovine
Clonality	Rabbit
Calculated MW	Polyclonal 60kDa KDa

CYP4F2 antibody - C-terminal region - Additional Information**Gene ID 8529**Alias Symbol **CPF2****Other Names**

Phylloquinone omega-hydroxylase CYP4F2, 1.14.13.194, 20-hydroxyeicosatetraenoic acid synthase, 20-HETE synthase, 1.14.13.-, Arachidonic acid omega-hydroxylase, CYP11B2, Cytochrome P450 4F2, Cytochrome P450-LTB-omega, Leukotriene-B(4) 20-monooxygenase 1, Leukotriene-B(4) omega-hydroxylase 1, 1.14.13.30, CYP4F2 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=2645)
target="_blank">HGNC:2645)

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-CYP4F2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

CYP4F2 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

CYP4F2 antibody - C-terminal region - Protein Information

Name CYP4F2 {ECO:0000303|PubMed:10492403, ECO:0000312|HGNC:HGNC:2645}

Function

A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids, eicosanoids and vitamins (PubMed:<http://www.uniprot.org/citations/18577768> target="_blank">18577768, PubMed:10833273, PubMed:10660572, PubMed:11997390, PubMed:17341693, PubMed:18574070). 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 predominantly the oxidation of the terminal carbon (omega-oxidation) of long- and very long-chain fatty acids. Displays high omega-hydroxylase activity toward polyunsaturated fatty acids (PUFAs) (PubMed:18577768). Participates in the conversion of arachidonic acid to omega-hydroxyeicosatetraenoic acid (20-HETE), a signaling molecule acting both as vasoconstrictive and natriuretic with overall effect on arterial blood pressure (PubMed:10660572, PubMed:17341693, PubMed:18574070). Plays a role in the oxidative inactivation of eicosanoids, including both pro-inflammatory and anti-inflammatory mediators such as leukotriene B4 (LTB4), lipoxin A4 (LXA4), and several HETEs (PubMed:8026587, PubMed:9799565, PubMed:10833273, PubMed:10660572, PubMed:17341693, PubMed:18574070, PubMed:18577768). Catalyzes omega-hydroxylation of 3-hydroxy fatty acids (PubMed:18065749). Converts monoepoxides of linoleic acid leukotoxin and isoleukotoxin to omega-hydroxylated metabolites (PubMed:15145985). Contributes to the degradation of very long-chain fatty acids (VLCFAs) by catalyzing successive omega-oxidations and chain shortening (PubMed:16547005, PubMed:18182499). Plays an important role in vitamin metabolism by chain shortening. Catalyzes omega-hydroxylation of the phytyl chain of tocopherols (forms of vitamin E), with preference for gamma-tocopherols over alpha-tocopherols, thus promoting retention of alpha-tocopherols in tissues (PubMed:11997390). Omega-hydroxylates and inactivates phyloquinone (vitamin K1), and menaquinone-4 (MK-4, a form of vitamin K2), both acting as cofactors in blood coagulation (PubMed:19297519, PubMed:24138531).

Cellular Location

Microsome membrane; Peripheral membrane protein. Endoplasmic reticulum membrane; Peripheral membrane protein

Tissue Location

Liver. Also present in kidney: specifically expressed in the S2 and S3 segments of proximal tubules in cortex and outer medulla (PubMed:10660572).

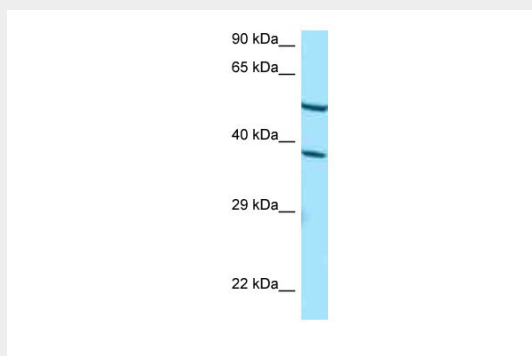
CYP4F2 antibody - C-terminal region - Protocols

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

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CYP4F2 antibody - C-terminal region - Images



WB Suggested Anti-CYP4F2 Antibody Titration: 1.0 µg/ml

Positive Control: HepG2 Whole Cell CYP4F2 is strongly supported by BioGPS gene expression data to be expressed in Human HepG2 cells

CYP4F2 antibody - C-terminal region - References

Kikuta Y., et al. FEBS Lett. 348:70-74(1994).

Kikuta Y., et al. DNA Cell Biol. 18:723-730(1999).

Chen L., et al. Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.

Ota T., et al. Nat. Genet. 36:40-45(2004).

Grimwood J., et al. Nature 428:529-535(2004).