

# Anti-CYP4F2 Antibody (N-Terminus)

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS18409

## Product Information

Application	WB, IHC-P, IP
Primary Accession	<a href="#">P78329</a>
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	59853
Concentration (mg/ml)	1 mg/ml

## Additional Information

Gene ID	8529
Alias Symbol	CYP4F2
Other Names	CYP4F2, CYP4F2, Cytochrome P450 4F2, Cytochrome P450-LTB-omega, CPF2
Target/Specificity	Recognizes endogenous levels of Cytochrome P450 4F2 protein.
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-CYP4F2 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Name	CYP4F2 {ECO:0000303   PubMed:10492403, ECO:0000312   HGNC:HGNC:2645}
Function	<p>A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids, eicosanoids and vitamins (PubMed:<a href="#">10660572</a>, PubMed:<a href="#">10833273</a>, PubMed:<a href="#">11997390</a>, PubMed:<a href="#">17341693</a>, PubMed:<a href="#">18574070</a>, PubMed:<a href="#">18577768</a>). 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:<a href="#">18577768</a>). 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:<a href="#">10660572</a>, PubMed:<a href="#">17341693</a>, PubMed:<a href="#">18574070</a>). Plays a role in the oxidative inactivation of eicosanoids, including both</p>

pro-inflammatory and anti-inflammatory mediators such as leukotriene B4 (LTB4), lipoxin A4 (LXA4), and several HETEs (PubMed:[10660572](#), PubMed:[10833273](#), PubMed:[17341693](#), PubMed:[18574070](#), PubMed:[18577768](#), PubMed:[8026587](#), PubMed:[9799565](#)). 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 phytol 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 phylloquinone (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).

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