

CYP4V2 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17539B

Specification

CYP4V2 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	O6ZWL3
Other Accession	NP_997235.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	60724
Antigen Region	496-525

CYP4V2 Antibody (C-term) - Additional Information

Gene ID 285440

Other Names

Cytochrome P450 4V2, 11413-, Docosahexaenoic acid omega-hydroxylase CYP4V2, CYP4V2

Target/Specificity

This CYP4V2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 496-525 amino acids from the C-terminal region of human CYP4V2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

CYP4V2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP4V2 Antibody (C-term) - Protein Information

Name CYP4V2

Function A cytochrome P450 monooxygenase involved in fatty acid metabolism in the eye.

Catalyzes the omega-hydroxylation of polyunsaturated fatty acids (PUFAs) docosahexaenoate (DHA) and its precursor eicosapentaenoate (EPA), and may contribute to the homeostasis of these retinal PUFAs (PubMed:[22772592](#)). Omega hydroxylates saturated fatty acids such as laurate, myristate and palmitate, the catalytic efficiency decreasing in the following order: myristate > laurate > palmitate (C14>C12>C16) (PubMed:[19661213](#)). 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).

Cellular Location

Endoplasmic reticulum membrane; Single-pass membrane protein

Tissue Location

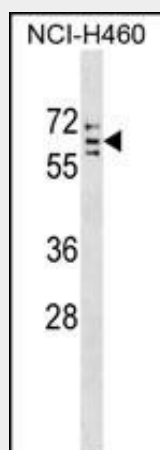
Broadly expressed. Detected in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, retina, retinal pigment epithelium (RPE) and lymphocytes

CYP4V2 Antibody (C-term) - 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](#)

CYP4V2 Antibody (C-term) - Images



CYP4V2 Antibody (C-term) (Cat. #AP17539b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the CYP4V2 antibody detected the CYP4V2 protein (arrow).

CYP4V2 Antibody (C-term) - Background

This gene encodes a member of the cytochrome P450 hemethiolate protein superfamily which are involved in oxidizing various substrates in the metabolic pathway. It is implicated in the metabolism of fatty acid precursors into n-3 polyunsaturated

fatty acids.

CYP4V2 Antibody (C-term) - References

Yokoi, Y., et al. Acta Ophthalmol 88(5):607-609(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Pelak, K., et al. J. Infect. Dis. 201(8):1141-1149(2010)
Nakano, M., et al. Drug Metab. Dispos. 37(11):2119-2122(2009)
Li, Y., et al. J. Thromb. Haemost. 7(11):1802-1808(2009)