

CYP4V2 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP17539b

Specification

CYP4V2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

Q6ZWL3

CYP4V2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 285440

Other Names

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CYP4V2 Antibody (C-term) Blocking Peptide - 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<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).

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) Blocking Peptide - Protocols

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

Blocking Peptides

CYP4V2 Antibody (C-term) Blocking Peptide - Images

CYP4V2 Antibody (C-term) Blocking Peptide - Background

This gene encodes a member of the cytochrome P450hemethiolate 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) Blocking Peptide - 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)