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CYP4F3 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8646a

Specification

CYP4F3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q08477

CYP4F3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 4051

Other Names
Docosahexaenoic acid omega-hydroxylase CYP4F3, 20-hydroxyeicosatetraenoic acid synthase, 20-HETE synthase, 11413-, CYPIVF3, Cytochrome P450 4F3, Cytochrome P450-LTB-omega, Leukotriene-B(4) 20-monooxygenase 2, Leukotriene-B(4) omega-hydroxylase 2, CYP4F3, LTB4H

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8646a was selected from the N-term region of human CYP4F3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

CYP4F3 Antibody (N-term) Blocking Peptide - Protein Information

Name CYP4F3 {ECO:0000303|PubMed:9539102, ECO:0000312|HGNC:HGNC:2646}

Function
A cytochrome P450 monooxygenase involved in the metabolism of various endogenous substrates, including fatty acids and their oxygenated derivatives (oxylipins) (PubMed:8486631, PubMed:9675028, PubMed:11461919, PubMed:15145985, PubMed:16547005, PubMed:16820285, PubMed:18182499, PubMed:18065749, PubMed:<a

href="http://www.uniprot.org/citations/18577768" target="_blank">18577768). 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) (PubMed:9675028). May play a role in inactivation of pro- inflammatory and anti-inflammatory oxylipins during the resolution of inflammation (PubMed:8486631, PubMed:9675028, PubMed:11461919, PubMed:15145985, PubMed:15364545, PubMed:16547005, PubMed:16820285, PubMed:18182499, PubMed:18065749, PubMed:18577768).

Cellular Location
Endoplasmic reticulum membrane; Single-pass membrane protein. Microsome membrane; Single-pass membrane protein

Tissue Location
[Isoform CYP4F3A]: Selectively expressed in blood neutrophils and bone marrow cells. Coexpressed with CYP4F3B in prostate, ileum and trachea.

CYP4F3 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

CYP4F3 Antibody (N-term) Blocking Peptide - Images

CYP4F3 Antibody (N-term) Blocking Peptide - Background

CYP4F3 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. The enzyme starts the process of inactivating and degrading leukotriene B4, a potent mediator of inflammation.

CYP4F3 Antibody (N-term) Blocking Peptide - References

Kikuta,Y., et.al., FEBS Lett. 348 (1), 70-74 (1994)Kikuta,Y., et,al., DNA Cell Biol. 17 (3), 221-230 (1998)