

**CYP4F22 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13937b****Specification**

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**CYP4F22 Antibody (C-term) Blocking peptide - Product Information**Primary Accession [Q6NT55](#)**CYP4F22 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 126410**Other Names**

Cytochrome P450 4F22, 11414-, CYP4F22

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13937b was selected from the C-term region of CYP4F22. 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.

**CYP4F22 Antibody (C-term) Blocking peptide - Protein Information****Name** CYP4F22 {ECO:0000303|PubMed:26056268, ECO:0000312|HGNC:HGNC:26820}**Function**

A cytochrome P450 monooxygenase involved in epidermal ceramide biosynthesis. Hydroxylates the terminal carbon (omega- hydroxylation) of ultra-long-chain fatty acyls (C28-C36) prior to ceramide synthesis (PubMed:<a href="http://www.uniprot.org/citations/26056268" target="\_blank">26056268</a>). Contributes to the synthesis of three classes of omega-hydroxy-ultra-long chain fatty acylceramides having sphingosine, 6-hydroxysphingosine and phytosphingosine bases, all major lipid components that underlie the permeability barrier of the stratum corneum (PubMed:<a href="http://www.uniprot.org/citations/26056268" target="\_blank">26056268</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) (PubMed:<a href="http://www.uniprot.org/citations/26056268" target="\_blank">26056268</a>).

**Cellular Location**

Endoplasmic reticulum membrane; Single-pass type I membrane protein. Microsome membrane; Single-pass type I membrane protein

### **CYP4F22 Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **CYP4F22 Antibody (C-term) Blocking peptide - Images**

### **CYP4F22 Antibody (C-term) Blocking peptide - Background**

This gene encodes a member of the cytochrome P450superfamily of enzymes. The cytochrome P450 proteins aremonooxygenases which catalyze many reactions involved in drugmetabolism and synthesis of cholesterol, steroids and other lipids.This gene is part of a cluster of cytochrome P450 genes onchromosome 19 and encodes an enzyme thought to play a role in the12(R)-lipoxygenase pathway. Mutations in this gene are the cause ofichthyosis lamellar type 3.

### **CYP4F22 Antibody (C-term) Blocking peptide - References**

Elias, P.M., et al. J. Lipid Res. 49(4):697-714(2008)Lefevre, C., et al. Hum. Mol. Genet. 15(5):767-776(2006)Nelson, D.R., et al. Pharmacogenetics 14(1):1-18(2004)Fischer, J., et al. Am. J. Hum. Genet. 66(3):904-913(2000)