

CYP4F12 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7895a**Specification**

CYP4F12 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q9HCS2](#)**CYP4F12 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 66002**Other Names**

Cytochrome P450 4F12, CYP4F12, CYP4F12

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7895a](/products/AP7895a) was selected from the N-term region of human CYP4F12. 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.

CYP4F12 Antibody (N-term) Blocking Peptide - Protein Information**Name** CYP4F12 {ECO:0000303|PubMed:16112640, ECO:0000312|HGNC:HGNC:18857}**Function**

A cytochrome P450 monooxygenase involved in the metabolism of endogenous polyunsaturated fatty acids (PUFAs). 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 the hydroxylation of carbon hydrogen bonds, with preference for omega-2 position. Metabolizes (5Z,8Z,11Z,14Z)- eicosatetraenoic acid (arachidonate) toward 18-hydroxy arachidonate (PubMed: [11162607](http://www.uniprot.org/citations/11162607)). Catalyzes the epoxidation of double bonds of PUFAs such as docosapentaenoic and docosahexaenoic acids (PubMed: [16112640](http://www.uniprot.org/citations/16112640)). Has low omega-hydroxylase activity toward leukotriene B4 and arachidonate (PubMed: [11162645](http://www.uniprot.org/citations/11162645)). Involved in the metabolism of xenobiotics. Catalyzes the

hydroxylation of the antihistamine drug ebastine (PubMed:11162645).

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9HBI6}. Microsome membrane {ECO:0000250|UniProtKB:Q9HBI6}

Tissue Location

Expressed in small intestine, liver, colon and heart.

CYP4F12 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CYP4F12 Antibody (N-term) Blocking Peptide - Images**CYP4F12 Antibody (N-term) Blocking Peptide - Background**

CYP4F12 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 likely localizes to the endoplasmic reticulum.

CYP4F12 Antibody (N-term) Blocking Peptide - References

Dhar,M., J. Lipid Res. 49 (3), 612-624 (2008)Stark,K., Arch. Biochem. Biophys. 441 (2), 174-181 (2005)Nelson,D.R., Pharmacogenetics 14 (1), 1-18 (2004)