

CYP39A1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2824a**Specification**

CYP39A1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [O9NYL5](#)
Other Accession [Q06609](#)

CYP39A1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 51302

Other Names

24-hydroxycholesterol 7-alpha-hydroxylase, Cytochrome P450 39A1, hCYP39A1, Oxysterol 7-alpha-hydroxylase, CYP39A1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2824a](/products/AP2824a) was selected from the N-term region of human CYP39A1. 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.

CYP39A1 Antibody (N-term) Blocking Peptide - Protein Information

Name CYP39A1 {ECO:0000303|PubMed:25201972, ECO:0000312|HGNC:HGNC:17449}

Function

A cytochrome P450 monooxygenase involved in neural cholesterol clearance through bile acid synthesis (PubMed: [25201972](http://www.uniprot.org/citations/25201972), PubMed: [10748047](http://www.uniprot.org/citations/10748047)). Catalyzes 7-alpha hydroxylation of (24S)- hydroxycholesterol, a neural oxysterol that is metabolized to bile acids in the liver (PubMed: [25201972](http://www.uniprot.org/citations/25201972), PubMed: [10748047](http://www.uniprot.org/citations/10748047)). 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: [25201972](#)).

href="http://www.uniprot.org/citations/25201972" target="_blank">25201972, PubMed:10748047).

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q64654}; Multi-pass membrane protein. Microsome membrane {ECO:0000250|UniProtKB:Q64654}; Multi-pass membrane protein

Tissue Location

Liver specific..

CYP39A1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CYP39A1 Antibody (N-term) Blocking Peptide - Images**CYP39A1 Antibody (N-term) Blocking Peptide - Background**

CYP39A1 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 endoplasmic reticulum protein is involved in the conversion of cholesterol to bile acids. Its substrates include the oxysterols 25-hydroxycholesterol, 27-hydroxycholesterol and 24-hydroxycholesterol.

CYP39A1 Antibody (N-term) Blocking Peptide - References

Nelson,D.R., Pharmacogenetics 14 (1), 1-18 (2004)Li-Hawkins,J., J. Biol. Chem. 275 (22), 16543-16549 (2000)