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CYP2U1 Antibody (Center E202) Blocking Peptide

Synthetic peptide
Catalog # BP7889c

Specification

CYP2U1 Antibody (Center E202) Blocking Peptide - Product Information

Primary Accession Q7Z449

CYP2U1 Antibody (Center E202) Blocking Peptide - Additional Information

Gene ID 113612

Other Names
Cytochrome P450 2U1, CYP2U1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7889c was selected from the Center region of human CYP2U1. 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.

CYP2U1 Antibody (Center E202) Blocking Peptide - Protein Information

Name CYP2U1 {ECO:0000303|PubMed:14660610, ECO:0000312|HGNC:HGNC:20582}

Function
A cytochrome P450 monooxygenase involved in the metabolism of arachidonic acid and its conjugates (PubMed:14660610, PubMed:24563460). 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:14660610, PubMed:24563460). Acts as an omega and omega-1 hydroxylase for arachidonic acid and possibly for other long chain fatty acids. May modulate the arachidonic acid signaling pathway and play a role in other fatty acid signaling processes (PubMed:14660610, PubMed:<a href="http://www.uniprot.org/citations/24563460"

target="_blank">24563460). May down-regulate the biological activities of N-arachidonoyl-serotonin, an endocannabinoid that has anti-nociceptive effects through inhibition of fatty acid amide hydrolase FAAH, TRPV1 receptor and T-type calcium channels. Catalyzes C-2 oxidation of the indole ring of N-arachidonoyl-serotonin forming a less active product 2-oxo-N-arachidonoyl-serotonin (PubMed:24563460).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Microsome membrane; Multi-pass membrane protein. Mitochondrion inner membrane; Multi-pass membrane protein

Tissue Location
Widely expressed with stronger expression in thymus, heart and cerebellum.

CYP2U1 Antibody (Center E202) Blocking Peptide - Protocols

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

- Blocking Peptides

CYP2U1 Antibody (Center E202) Blocking Peptide - Images

CYP2U1 Antibody (Center E202) Blocking Peptide - Background

CYP2U1 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 enzyme is a hydroxylase that metabolizes arachidonic acid, docosahexaenoic acid, and other long chain fatty acids.

CYP2U1 Antibody (Center E202) Blocking Peptide - References

Karlgren,M., Biochem. Biophys. Res. Commun. 315 (3), 679-685 (2004)Chuang,S.S., J. Biol. Chem. 279 (8), 6305-6314 (2004)