

CYP2B6 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP11104c

Specification

CYP2B6 Antibody (Center) Blocking peptide - Product Information

Primary Accession

P20813

CYP2B6 Antibody (Center) Blocking peptide - Additional Information

Gene ID 1555

Other Names

Cytochrome P450 2B6, 11413-, 4-cineole 2-exo-monooxygenase, CYPIIB6, Cytochrome P450 IIB1, CYP2B6

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.

CYP2B6 Antibody (Center) Blocking peptide - Protein Information

Name CYP2B6 {ECO:0000303|PubMed:21289075, ECO:0000312|HGNC:HGNC:2615}

Function

A cytochrome P450 monooxygenase involved in the metabolism of endocannabinoids and steroids (PubMed:21289075, PubMed:12865317). 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 (NADPH-- hemoprotein reductase). Catalyzes the epoxidation of double bonds of arachidonoylethanolamide (anandamide) to 8,9-, 11,12-, and 14,15- epoxyeicosatrienoic acid ethanolamides (EpETrE-EAs), potentially modulating endocannabinoid system signaling (PubMed:21289075). Hydroxylates steroid hormones, including testosterone at C-16 and estrogens at C-2 (PubMed: 21289075, PubMed:12865317). Plays a role in the oxidative metabolism of xenobiotics, including plant lipids and drugs (PubMed:11695850, PubMed:22909231). Acts as a 1,4-cineole 2-exo- monooxygenase (PubMed: 11695850).



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Cellular Location

Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome membrane; Peripheral membrane protein

Tissue Location

Expressed in liver, lung and heart right ventricle.

CYP2B6 Antibody (Center) Blocking peptide - Protocols

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

Blocking Peptides

CYP2B6 Antibody (Center) Blocking peptide - Images

CYP2B6 Antibody (Center) Blocking peptide - Background

This gene, CYP2B6, 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 protein localizes to the endoplasmic reticulum and itsexpression is induced by phenobarbital. The enzyme is known tometabolize some xenobiotics, such as the anti-cancer drugscyclophosphamide and ifosphamide. Transcript variants for this genehave been described; however, it has not been resolved whetherthese transcripts are in fact produced by this gene or by a closelyrelated pseudogene, CYP2B7. Both the gene and the pseudogene arelocated in the middle of a CYP2A pseudogene found in a largecluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2Fsubfamilies on chromosome 19q.

CYP2B6 Antibody (Center) Blocking peptide - References

Figueroa, S.C., et al. Ther Drug Monit 32(5):579-585(2010)Chou, M., et al. Antimicrob. Agents Chemother. 54(10):4432-4439(2010)Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)Bunten, H., et al. Clin. Pharmacol. Ther. 88(3):383-389(2010)Gounden, V., et al. AIDS Res Ther 7, 32 (2010):