10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CYP2W1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP7792c

Specification

CYP2W1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q8TAV3

CYP2W1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 54905

Other Names
Cytochrome P450 2W1, 11414-, CYPIIW1, CYP2W1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7792c was selected from the Center region of human CYP2W1. 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.

CYP2W1 Antibody (Center) Blocking Peptide - Protein Information

Name CYP2W1 {ECO:0000303|PubMed:26936974, ECO:0000312|HGNC:HGNC:20243}

Function
A cytochrome P450 monooxygenase that may play a role in retinoid and phospholipid metabolism (PubMed:22591743, PubMed:26936974). Catalyzes the hydroxylation of saturated carbon hydrogen bonds. Hydroxylates all trans-retinoic acid (atRA) to 4- hydroxyretinoate and may regulate atRA clearance. Other retinoids such as all-trans retinol and all-trans retinal are potential endogenous substrates (PubMed:26936974). Catalyzes both epoxidation of double bonds and hydroxylation of carbon hydrogen bonds of the fatty acyl chain of 1-acylphospholipids/2-lysophospholipids. Can metabolize various lysophospholipids classes including lysophosphatidylcholines (LPCs), lysophosphatidylinositols (LPIs), lysophosphatidylserines (LPSs), lysophosphatidylglycerols (LPGs), lysophosphatidylethanolamines (LPEs) and lysophosphatidic acids (LPAs) (PubMed:<a

href="http://www.uniprot.org/citations/22591743" target="_blank">22591743). Has low or no activity toward 2-acylphospholipids/1-lysophospholipids, diacylphospholipids and free fatty acids (PubMed:26936974, PubMed:22591743). May play a role in tumorigenesis by activating procarcinogens such as aflatoxin B1, polycyclic aromatic hydrocarbon dihydrodiols and aromatic amines (PubMed:20805301, PubMed:16551781, PubMed:24278521). 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:22591743, PubMed:26936974).

Cellular Location
Endoplasmic reticulum lumen. Cell membrane. Microsome membrane. Note=About 8% are expressed on the cell surface.

Tissue Location
Very low levels are detected in fetal and adult tissues. Highly expressed in several tumor samples, in particular colon and adrenal tumors.

CYP2W1 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

CYP2W1 Antibody (Center) Blocking Peptide - Images

CYP2W1 Antibody (Center) Blocking Peptide - Background

CYP2W1 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.

CYP2W1 Antibody (Center) Blocking Peptide - References

Hanzawa,Y., Drug Metab. Dispos. 36 (2), 349-352 (2008)Karlgren,M., Biochem. Biophys. Res. Commun. 341 (2), 451-458 (2006)