

CYP4X1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7885a

Specification

CYP4X1 Antibody (N-term) - Product Information

Application WB, IHC-P,E **Primary Accession O8N118** Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 58875 Antigen Region 157-183

CYP4X1 Antibody (N-term) - Additional Information

Gene ID 260293

Other Names

Cytochrome P450 4X1, CYPIVX1, CYP4X1

Target/Specificity

This CYP4X1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 157-183 amino acids from the N-terminal region of human CYP4X1.

Dilution

WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CYP4X1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP4X1 Antibody (N-term) - Protein Information

Name CYP4X1 {ECO:0000303|PubMed:18549450, ECO:0000312|HGNC:HGNC:20244}

Function A cytochrome P450 monooxygenase that selectively catalyzes the epoxidation of the last double bond of the arachidonoyl moiety of anandamide, potentially modulating



endocannabinoid signaling. Has no hydroxylase activity toward various fatty acids, steroids and prostaglandins. 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).

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q6A152}; Single-pass membrane protein. Microsome membrane {ECO:0000250|UniProtKB:Q6A152}; Single-pass membrane protein

Tissue Location

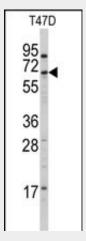
Expressed in brain, heart, kidney and skin and, at lower levels, in skeletal muscle and liver (PubMed:16478468, PubMed:18549450). In the brain, high levels are detected in amygdala and lower levels in globus pallidus and cerebellum (PubMed:18549450) In the heart, very high levels in aorta, but very low levels in other heart regions (PubMed:16478468, PubMed:18549450). Also expressed in breast, prostate and colon (PubMed:18549450)

CYP4X1 Antibody (N-term) - Protocols

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

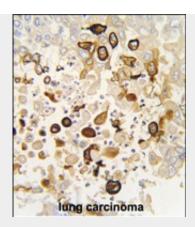
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

CYP4X1 Antibody (N-term) - Images



Western blot analysis of anti-CYP4X1 Antibody (N-term) (Cat.#AP7885a) in T47D cell line lysates (35ug/lane). CYP4X1 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with CYP4X1 antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CYP4X1 Antibody (N-term) - Background

CYP4X1 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. The expression pattern of a similar rat protein suggests that this protein may be involved in neurovascular function in the brain.

CYP4X1 Antibody (N-term) - References

Savas, U., Arch. Biochem. Biophys. 436 (2), 377-385 (2005) Nelson, D.R., Pharmacogenetics 14 (1), 1-18 (2004) Bylund, J., Biochem. Biophys. Res. Commun. 296 (3), 677-684 (2002)