

Anti-Cytochrome P450 39A1 Antibody

Rabbit polyclonal antibody to Cytochrome P450 39A1 Catalog # AP59839

Specification

Anti-Cytochrome P450 39A1 Antibody - Product Information

Application WB, IH
Primary Accession O9NYL5
Other Accession O9JKJ9

Reactivity Human, Mouse, Rat, Monkey, Pig

Host Rabbit
Clonality Polyclonal
Calculated MW 54116

Anti-Cytochrome P450 39A1 Antibody - Additional Information

Gene ID 51302

Other Names

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

Target/Specificity

Recognizes endogenous levels of Cytochrome P450 39A1 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200) IH~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-Cytochrome P450 39A1 Antibody - 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, PubMed:10748047). Catalyzes 7-alpha hydroxylation of (24S)- hydroxycholesterol, a neural oxysterol that is metabolized to bile acids in the liver (PubMed:25201972, PubMed: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:<a

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

Cellular Location

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

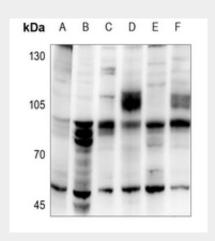
Tissue Location Liver specific..

Anti-Cytochrome P450 39A1 Antibody - Protocols

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

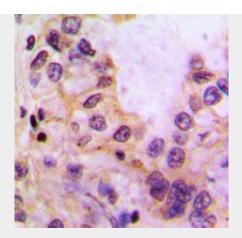
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-Cytochrome P450 39A1 Antibody - Images



Western blot analysis of Cytochrome P450 39A1 expression in C6 (A), AML12 (B), PC3 (C), Panc1 (D), HEK293T (E), HepG2 (F) whole cell lysates.





Immunohistochemical analysis of Cytochrome P450 39A1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-Cytochrome P450 39A1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Cytochrome P450 39A1. The exact sequence is proprietary.