

CYP8B1 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8787B

Specification

CYP8B1 Antibody (C-term) - Product Information

Application	IHC-P, WB, FC,E
Primary Accession	Q9UNU6
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	58068
Antigen Region	471-501

CYP8B1 Antibody (C-term) - Additional Information

Gene ID 1582

Other Names

7-alpha-hydroxycholest-4-en-3-one 12-alpha-hydroxylase, 7-alpha-hydroxy-4-cholesten-3-one 12-alpha-hydroxylase, CYPVIII B1, Cytochrome P450 8B1, Sterol 12-alpha-hydroxylase, CYP8B1, CYP12

Target/Specificity

This CYP8B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 471-501 amino acids from the C-terminal region of human CYP8B1.

Dilution

IHC-P~~1:10~50

WB~~1:1000

FC~~1:10~50

E~~Use at an assay dependent concentration.

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

CYP8B1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CYP8B1 Antibody (C-term) - Protein Information

Name CYP8B1 {ECO:0000303|PubMed:10051404, ECO:0000312|HGNC:HGNC:2653}

Function A cytochrome P450 monooxygenase involved in primary bile acid biosynthesis. Catalyzes the 12 α -hydroxylation of 7 α -hydroxy-4-cholesten-3-one, an intermediate metabolite in cholic acid biosynthesis (PubMed:[10051404](#)). Controls biliary balance of cholic acid and chenodeoxycholic acid, ultimately regulating the intestinal absorption of dietary lipids (By similarity). 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--hemoprotein reductase) (By similarity).

Cellular Location

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:O02766}; Single-pass membrane protein. Microsome membrane {ECO:0000250|UniProtKB:O02766}; Single-pass membrane protein

Tissue Location

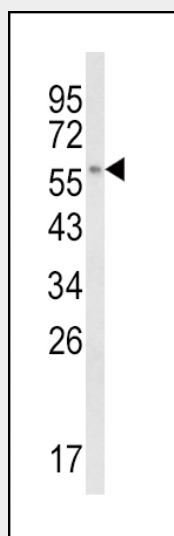
Liver..

CYP8B1 Antibody (C-term) - Protocols

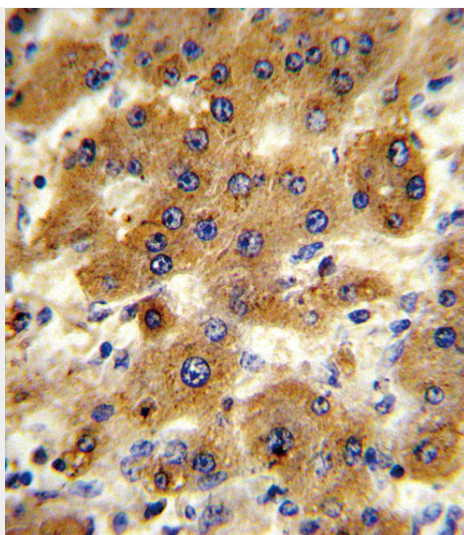
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

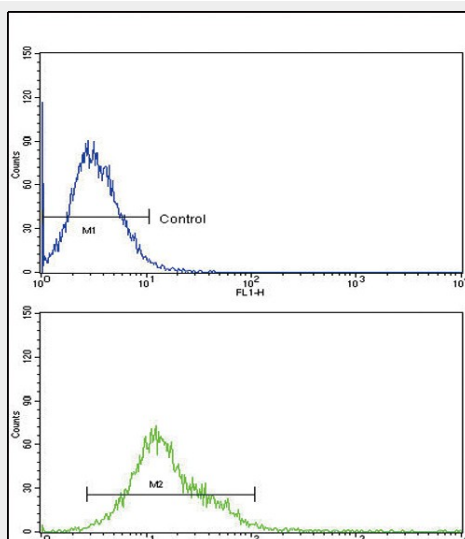
CYP8B1 Antibody (C-term) - Images



Western blot analysis of CYP8B1 Antibody (C-term) (Cat. #AP8787b) in K562 cell line lysates (35 μ g/lane). CYP8B1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with CYP8B1 Antibody (C-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.



CYP8B1 Antibody (C-term) (Cat. #AP8787b) flow cytometric analysis of k562 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CYP8B1 Antibody (C-term) - Background

CYP8B1 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 endoplasmic reticulum membrane protein catalyzes the conversion of 7 alpha-hydroxy-4-cholesten-3-one into 7-alpha,12-alpha-dihydroxy-4-cholesten-3-one. The balance between these two steroids determines the relative amounts of cholic acid and chenodeoxycholic acid both of which are secreted in the bile and affect the solubility of cholesterol. This gene is unique among the cytochrome P450 genes in that it is intronless.

CYP8B1 Antibody (C-term) - References

Zhang, M. et.al., J. Biol. Chem. 276 (45), 41690-41699 (2001)
Wang, J., et.al., Histochem. Cell Biol. 123 (4-5), 441-446 (2005)