

Cytochrome P450 8B1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51917

Specification

Cytochrome P450 8B1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW

WB, E <u>Q9UNU6</u> Human, Mouse, Rat Rabbit Polyclonal 58 KDa

Cytochrome P450 8B1 Antibody - 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, CYPVIIIB1, Cytochrome P450 8B1, Sterol 12-alpha-hydroxylase, CYP8B1, CYP12

Dilution WB~~1:1000 E~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

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

Cytochrome P450 8B1 Antibody - 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 12alpha-hydroxylation of 7alpha-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:002766}; Single-pass membrane



protein. Microsome membrane {ECO:0000250|UniProtKB:002766}; Single-pass membrane protein

Tissue Location Liver..

Cytochrome P450 8B1 Antibody - Protocols

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

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

Cytochrome P450 8B1 Antibody - Images

Cytochrome P450 8B1 Antibody - Background

Involved in bile acid synthesis and is responsible for the conversion of 7 alpha-hydroxy-4-cholesten-3-one into 7 alpha, 12 alpha-dihydroxy-4-cholesten-3-one. Responsible for the balance between formation of cholic acid and chenodeoxycholic acid. Has a rather broad substrate specificity including a number of 7-alpha- hydroxylated C27 steroids.

Cytochrome P450 8B1 Antibody - References

Gaafvels M.,et al.Genomics 56:184-196(1999). Ota T.,et al.Nat. Genet. 36:40-45(2004). Muzny D.M.,et al.Nature 440:1194-1198(2006).