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CYP8B1 Polyclonal Antibody

Catalog # AP69425

Product Information

Application	WB, IHC-P
Primary Accession	Q9UNU6
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58068

Additional Information

Gene ID	1582
Other Names	CYP8B1; CYP12; 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
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

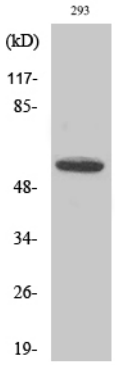
Protein Information

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:O02766}; Single-pass membrane protein. Microsome membrane {ECO:0000250|UniProtKB:O02766}; Single-pass membrane protein
Tissue Location	Liver..

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.

Images



Western Blot analysis of various cells using CYP8B1 Polyclonal Antibody