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CYP8B1 Polyclonal Antibody

Catalog # AP69425

Product Information

Application	WB, IHC-P, IF, ICC, E
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 IF~~1:50~200 ICC~~N/A E~~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	Sterol 12-alpha-hydroxylase involved in primary bile acid biosynthesis by catalyzing the 12alpha-hydroxylation of key intermediates including 7alpha-hydroxycholest-4-en-3-one, 3alpha,7alpha-dihydroxy-5beta-cholestan-26-oate and chenodeoxycholate along the classic pathway (PubMed:10051404, PubMed:30465713, PubMed:39214664). May also hydroxylate 5beta-cholestane-3alpha,7alpha-diol (By similarity). Functions as a monooxygenase, inserting one atom of molecular oxygen into substrates while reducing the second to water, using electrons supplied by NADPH via cytochrome P450 reductase (CPR) (By similarity). Controls biliary balance of cholic acid and chenodeoxycholic acid, thereby regulating intestinal absorption of dietary lipids (By similarity).
Cellular Location	Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:O02766}; Single-pass membrane protein. Microsome membrane

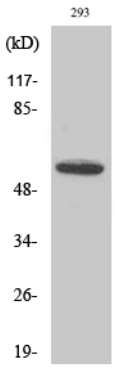
{ECO:0000250|UniProtKB:O02766}; Single-pass membrane protein

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.