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Anti-Cytochrome P450 8B1 Antibody

Catalog # AP51917

Product Information

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

Additional Information

Gene ID	1582
Other Names	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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 8B1. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1/50 - 1/100
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

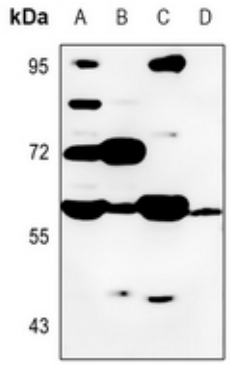
Name	CYP8B1 {ECO:0000303|PubMed:10051404, ECO:0000312|HGNC:HGNC:2653}
Function	Sterol 12-alpha-hydroxylase involved in primary bile acid biosynthesis by catalyzing the 12alpha-hydroxylation of key intermediates including 7alpha-hydroxycholest-4-en-3-one, 3alpha,7alpha-dihydroxy-5beta-cholestan-26-oate 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..

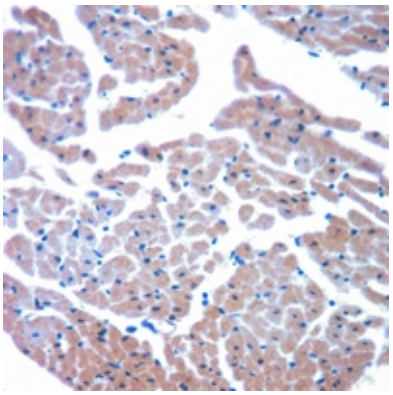
References

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).

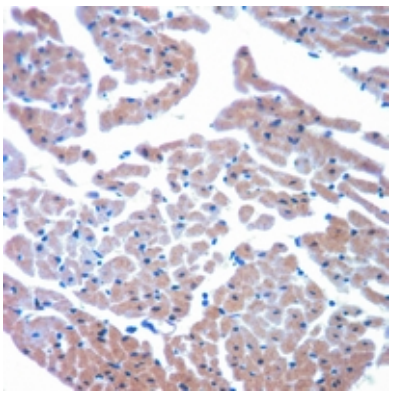
Images



Western blot analysis of Cytochrome P450 8B1 expression in mouse liver (A), mouse kidney (B), rat liver (C), rat kidney (D) whole cell lysates. (Predicted band size: 58 kD; Observed band size: 58 kD)



Immunohistochemical analysis of Cytochrome P450 8B1 staining in rat heart 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.



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