Product Name: CYP7B1 Rabbit Polyclonal Antibody
Catalog #: APRab09678

Summary

Production Name	CYP7B1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CYP7B1
Alternative Names	CYP7B1; 25-hydroxycholesterol 7-alpha-hydroxylase; Cytochrome P450 7B1; Oxysterol 7-alpha-hydroxylase
Gene ID	9420.0
SwissProt ID	O75881.The antiserum was produced against synthesized peptide derived from human Cytochrome P450 7B1. AA range:101-150

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000..
Molecular Weight	58kD

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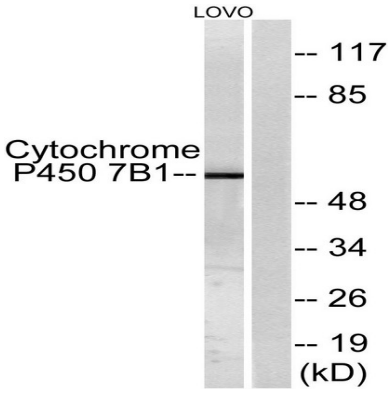
Background

This gene encodes 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 first reaction in the cholesterol catabolic pathway of extrahepatic tissues, which converts cholesterol to bile acids. This enzyme likely plays a minor role in total bile acid synthesis, but may also be involved in the development of atherosclerosis, neurosteroid metabolism and sex hormone synthesis. Mutations in this gene have been associated with hereditary spastic paraplegia (SPG5 or HSP), an autosomal recessive disorder. [provided by RefSeq, Apr 2016],catalytic activity:Cholest-5-ene-3-beta,25-diol + NADPH + O(2) = cholest-5-ene-3-beta,7-alpha,25-triol + NADP(+) + H(2)O.,catalytic activity:Cholest-5-ene-3-beta,27-diol + NADPH + O(2) = cholest-5-ene-3-beta,7-alpha,27-triol + NADP(+) + H(2)O.,cofactor:Heme group.,disease:Defects in CYP7B1 are the cause of congenital bile acid synthesis defect type 3 (CBAS3) [MIM:603711]. Clinical features include severe cholestasis, cirrhosis and liver synthetic failure. Hepatic microsomal oxysterol 7-alpha-hydroxylase activity is undetectable.,disease:Defects in CYP7B1 are the cause of spastic paraplegia autosomal recessive type 5A (SPG5A) [MIM:270800]. Spastic paraplegia is a neurodegenerative disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Rate of progression and the severity of symptoms are quite variable. Initial symptoms may include difficulty with balance, weakness and stiffness in the legs, muscle spasms, and dragging the toes when walking. In some forms of the disorder, bladder symptoms (such as incontinence) may appear, or the weakness and stiffness may spread to other parts of the body.,pathway:Lipid metabolism; bile acid biosynthesis.,similarity:Belongs to the cytochrome P450 family.,tissue specificity:Brain, testis, ovary, prostate, liver, colon, kidney, and small intestine.,

Research Area

Primary bile acid biosynthesis;Steroid hormone biosynthesis;

Image Data



Western blot analysis of lysates from LOVO cells, using Cytochrome P450 7B1 Antibody. The lane on the right is blocked with the synthesized peptide.

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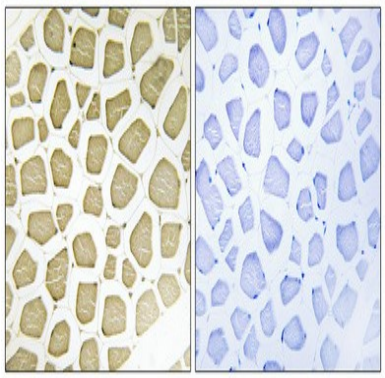

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle. Antibody was diluted at 1:100（4°,overnight）. High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl （right） obtaned from antibody was pre-absorbed by immunogen peptide.

Note

For research use only.