Best Tools for immunology Research

CYP7B1 Polyclonal Antibody

Catalog No :	YT1241
Reactivity :	Human;Rat;Mouse;
Applications :	WB;IHC;IF;ELISA
Target :	CYP7B1
Fields :	>>Primary bile acid biosynthesis;>>Steroid hormone biosynthesis
Gene Name :	CYP7B1
Protein Name :	25-hydroxycholesterol 7-alpha-hydroxylase
Human Gene Id :	9420
Human Swiss Prot No :	O75881
Mouse Swiss Prot No :	Q60991
Immunogen :	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 7B1. AA range:101-150
Specificity :	CYP7B1 Polyclonal Antibody detects endogenous levels of CYP7B1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 58kD

Cell Pathway : Primary bile acid biosynthesis;Steroid hormone biosynthesis;

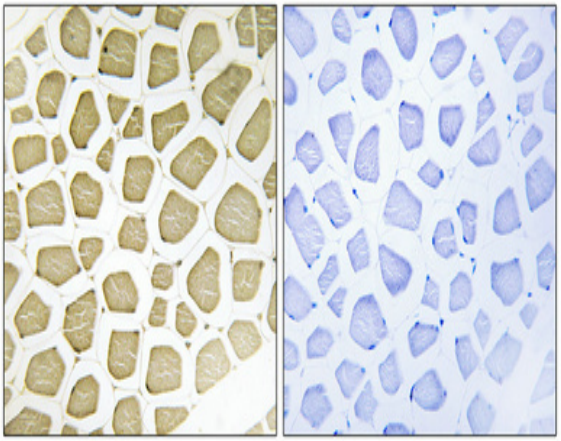
Background : This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum membrane protein catalyzes 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],

Function : 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 wit

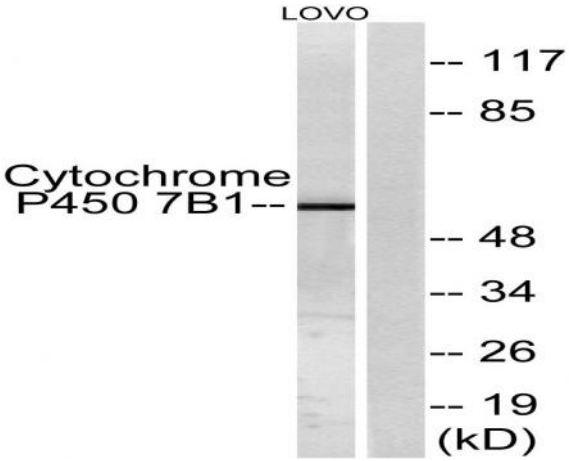
Subcellular Location : Endoplasmic reticulum membrane ; Multi-pass membrane protein . Microsome membrane ; Multi-pass membrane protein .

Expression : Widely expressed. Expressed in brain, testis, ovary, prostate, liver, colon, kidney, small intestine, thymus and spleen.

Products Images



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.



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