



CYP27A1 Rabbit mAb

Catalog No	YP-rAb-17769
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	CYP27A1
Protein Name	Sterol 26-hydroxylase mitochondrial
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	CYP27A1 ; CYP27 ; Sterol 26-hydroxylase ; mitochondrial ; 5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol 27-hydroxylase ; Cytochrome P-450C27/25 ; Cytochrome P450 27 ; Sterol 27-hydroxylase ; Vitamin D ; 3 ; 25-hydroxylase
Observed Band	55kD
Calculated Molecular Weight	60kD
Cell Pathway	Mitochondrion inner membrane ; Peripheral membrane protein . Post-translationally targeted to mitochondria. All three of the receptor proteins in the TOM complex, TOMM70, TOMM20 and TOMM22 are required for the translocation across the mitochondrial outer membrane. After translocation into the matrix, associates with the inner membrane as a membrane extrinsic protein. .
Tissue Specificity	Expressed in the neural retina and underlying retinal pigment epithelium (at protein level) (PubMed:21411718). Expressed in the gray and white matter of cerebellum (at protein level) (PubMed:28190002).
Function	Catalytic activity:5-beta-cholestane-3-alpha,7-alpha, 12-alpha-triol + NADPH + O(2) = (25R)-5-beta-cholestane-3-alpha,7-alpha, 12-alpha,26-tetraol + NADP(+) + H(2)O.,cofactor:Heme group.,Disease:Defects in CYP27A1 are the cause of cerebrotendinous xanthomatosis (CTX) [MIM:213700]. CTX is a rare sterol storage disorder characterized clinically by progressive neurologic dysfunction,





premature atherosclerosis, and cataracts.,Function:Catalyzes the first step in the oxidation of the side chain of sterol intermediates; the 27-hydroxylation of 5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol. Has also a vitamin D3-25-hydroxylase activity.,pathway:Hormone biosynthesis; cholecalciferol biosynthesis.,similarity:Belongs to the cytochrome P450 family.,

Background

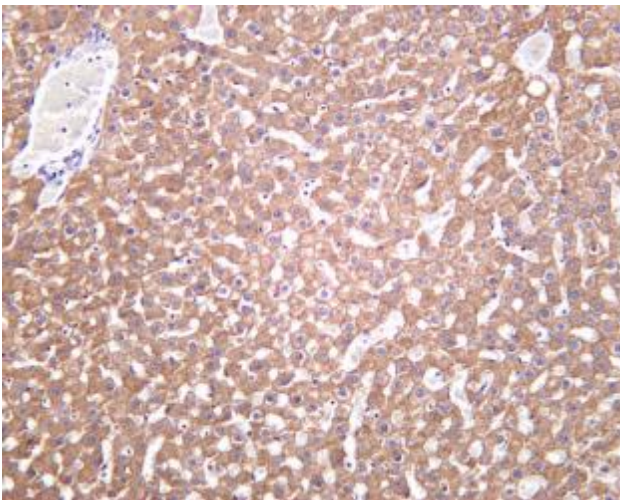
cytochrome P450 family 27 subfamily A member 1(CYP27A1) Homo sapiens This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This mitochondrial protein oxidizes cholesterol intermediates as part of the bile synthesis pathway. Since the conversion of cholesterol to bile acids is the major route for removing cholesterol from the body, this protein is important for overall cholesterol homeostasis. Mutations in this gene cause cerebrotendinous xanthomatosis, a rare autosomal recessive lipid storage disease. [provided by RefSeq, Jul 2008],

matters needing attention

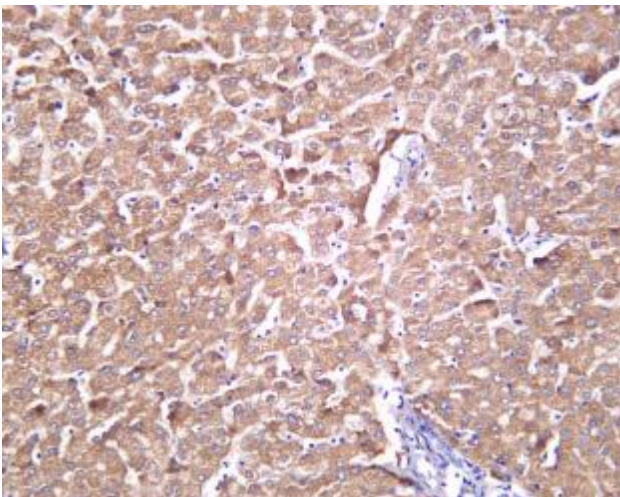
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Rat liver was stained with anti-CYP27A1 Rabbit antibody



Human liver was stained with anti-CYP27A1 Rabbit antibody





Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CYP27A1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Mouse kidney Lane 2: Caco-2
Predicted band size: 60kDa Observed band size: 55kDa

