



Anti-CYP27A1 monoclonal antibody (DCABH-11185)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description 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.

Immunogen	A synthetic peptide of human CYP27A1 is used for rabbit immunization.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Mouse, Rat, Human
Purification	Protein A
Conjugate	Unconjugated
Applications	FC, ICC/IF, IHC-P, WB
Size	100 µl
Buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	CYP27A1 cytochrome P450, family 27, subfamily A, polypeptide 1 [Homo sapiens]
Official Symbol	CYP27A1
Synonyms	CYP27A1; cytochrome P450, family 27, subfamily A, polypeptide 1; CYP27, cytochrome P450, subfamily XXVIIA (steroid 27 hydroxylase, cerebrotendinous xanthomatosis), polypeptide 1; sterol 26-hydroxylase, mitochondrial; cerebrotendinous xanthomatosis; CP27; CTX; cytochrome P450 27; sterol 27-hydroxylase; cytochrome P-450C27/25; vitamin D(3) 25-hydroxylase; cholestanetriol 26-monooxygenase; 5-beta-cholestane-3-alpha,7-alpha,12-alpha-triol 27-hydroxylase; 5-beta-cholestane-3-alpha, 7-alpha, 12-alpha-triol 26-hydroxylase; 5-beta-cholestane-3-alpha, 7-alpha, 12-alpha-triol 27-hydroxylase; cytochrome P450, subfamily XXVIIA (steroid 27-hydroxylase, cerebrotendinous xanthomatosis), polypeptide 1; CYP27;
Entrez Gene ID	1593
Protein Refseq	NP_000775
UniProt ID	Q02318
Chromosome Location	2q33-qter
Pathway	Bile acid and bile salt metabolism, organism-specific biosystem; Bile acid biosynthesis, cholesterol => cholate, organism-specific biosystem; Bile acid biosynthesis, cholesterol => cholate, conserved biosystem; Biological oxidations, organism-specific biosystem; Cytochrome P450 - arranged by substrate type, organism-specific biosystem;
Function	cholestanetriol 26-monooxygenase activity; cholesterol 26-hydroxylase activity; electron carrier activity; heme binding; metal ion binding; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen; steroid hydr