



CP27B Monoclonal Antibody

Catalog No	YP-mAb-07883
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CYP27B1 CYP1ALPHA CYP27B
Protein Name	25-hydroxyvitamin D-1 alpha hydroxylase, mitochondrial (EC 1.14.13.13) (25-OHD-1 alpha-hydroxylase) (25-hydroxyvitamin D(3) 1-alpha-hydroxylase) (VD3 1A hydroxylase) (Calcidiol 1-monooxygenase) (Cytoc
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	CP27B Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	55kD
Cell Pathway	Mitochondrion membrane.
Tissue Specificity	Kidney.
Function	catalytic activity:Calcidiol + NADPH + O(2) = calcitriol + NADP(+) + H(2)O.,cofactor:Heme group.,disease:Defects in CYP27B1 are a cause of vitamin D-dependent rickets type 1 (VDDR-1) [MIM:264700]; also known as pseudovitamin D deficiency rickets (PDDR). VDDR-1 is an autosomal recessive disease characterized by muscle weakness and early onset of rickets with hypocalcemia.,function:Catalyzes the conversion of 25-hydroxyvitamin D3 (25(OH)D) to 1-alpha,25-dihydroxyvitamin D3 (1,25(OH)2D) plays an important role in normal bone growth, calcium metabolism, and tissue differentiation.,pathway:Hormone biosynthesis; cholecalciferol biosynthesis.,similarity:Belongs to the cytochrome P450 family.,tissue specificity:Kidney.,
Background	cytochrome P450 family 27 subfamily B member 1(CYP27B1) 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. The protein encoded by this gene localizes to the inner mitochondrial membrane where it hydroxylates 25-hydroxyvitamin D3 at the 1alpha position. This reaction synthesizes 1alpha,25-dihydroxyvitamin D3, the active form of vitamin D3, which binds to the vitamin D receptor and regulates calcium metabolism. Thus this enzyme regulates the level of biologically active vitamin D and plays an important role in calcium homeostasis. Mutations in this gene can result in vitamin D-dependent rickets type I. [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.

Products Images