

## Anti-CYP27B1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

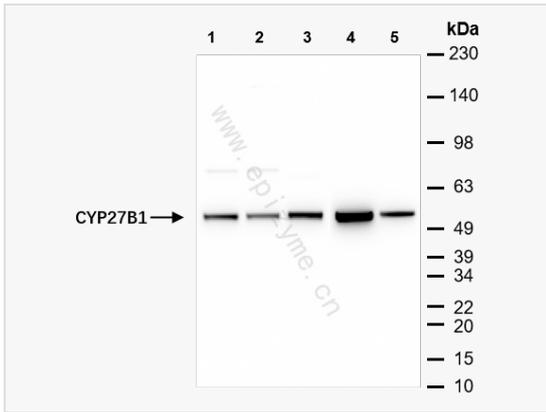
Catalog # R014237

### Product Information

Application	WB, IHC-P/IF (Tissue-P), ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	22D32P28
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human CYP27B1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-CYP27B1 Rabbit mAb [22D32P28] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	1alpha(OH)ase, 25-hydroxyvitamin D(3) 1-alpha-hydroxylase, 25-hydroxyvitamin D-1 alpha hydroxylase, 25-OHD-1 alpha-hydroxylase, Calcidiol 1-monoxygenase, CP27B_HUMAN, CP2B, CYP1, CYP1ALPHA, CYP27B, Cyp27b1, Cytochrome p450 27B1, Cytochrome p450 27B13, Cytochrome P450 family 27 subfamily B polypeptide 1, Cytochrome P450 subfamily XXVIII B (25-hydroxyvitamin D-1-alpha-hydroxylase) polypeptide 1, Cytochrome P450 subfamily XXVIII B polypeptide 1, Cytochrome P450C1 alpha, Cytochrome P450VD1-alpha, mitochondrial, P450C1 alpha, P450c1, P450C1-alpha, P450VD1-alpha, PDDR, VD3 1A hydroxylase, VDD1, VDDR, VDDR I, VDDRI, VDR.
Calculated MW	Calculated MW: 57 kDa; Observed MW: 57 kDa
Uniprot ID	O15528
Gene ID	1594
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. 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]
Cellular Location	Mitochondrion membrane.



Western Blot - Anti-CYP27B1 Rabbit mAb [22D32P28]

All lanes: R014237 at 1:1,000 dilution

Lane 1: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 2: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 3: A431 (Human epidermoid teratoma cell line) whole cell lysates

Lane 4: Rat kidney whole tissue lysates

Lane 5: Mouse brain whole tissue lysates

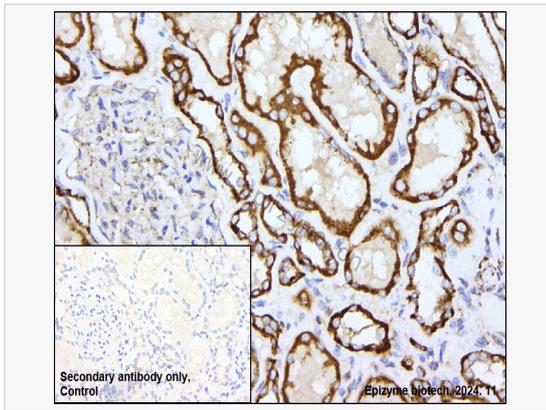
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 57 kDa

Observed band size: 57 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-CYP27B1 Rabbit mAb [22D32P28]

Sample: Paraformaldehyde-fixed, paraffin embedded human renal carcinoma tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R014237 at 1:200 dilution

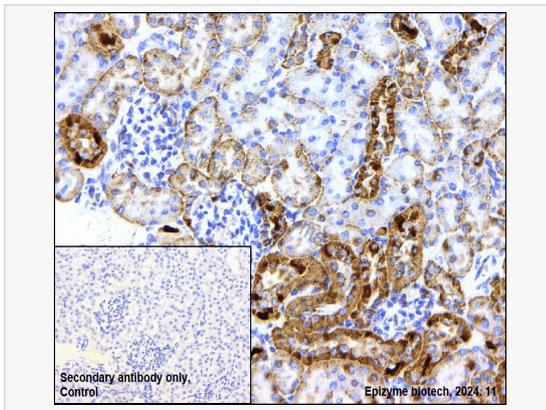
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-CYP27B1 Rabbit mAb [22D32P28]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse kidney tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: R014237 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.