



Rabbit Anti-CYP27B1 antibody

SL14146R

Product Name:	CYP27B1
Chinese Name:	细胞色素P450 27B1抗体
Alias:	1alpha(OH)ase; 25-hydroxyvitamin D(3) 1-alpha-hydroxylase; 25-hydroxyvitamin D-1 alpha hydroxylase; 25-OHD-1 alpha-hydroxylase; Calcidiol 1-monooxygenase; CP27B_HUMAN; CP2B; CYP1; CYP1ALPHA; CYP27B; Cyp27b1; Cytochrome p450 27B1; Cytochrome p450 27B13; Cytochrome P450 family 27 subfamily B polypeptide 1; Cytochrome P450 subfamily XXVIIB (25-hydroxyvitamin D-1-alpha-hydroxylase) polypeptide 1; Cytochrome P450 subfamily XXVIIB 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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	57kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CYP27B1:1-100/508
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

The cytochrome P450 proteins are monooxygenases that catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. P450 enzymes are classified into subfamilies based on their sequence similarities. CYP27B1, a 508-amino acid protein that belongs to the XXVIIB subfamily of the cytochrome P450 family, localizes to the mitochondrion and is expressed in the kidney. The CYP27B1 protein catalyzes the conversion of 25-hydroxyvitamin D3 (25(OH)D) to 1-alpha,25-dihydroxyvitamin D3 (1,25(OH)2D) and functions in calcium metabolism, normal bone growth, and tissue differentiation. Mutations in the gene which encodes for CYP27B1 cause vitamin D-dependent rickets type 1 (VDDR-1), also designated pseudovitamin D deficiency rickets (PDDR), an autosomal recessive disease characterized by early onset of rickets with hypocalcemia and muscle weakness.

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.

Subcellular Location:

Mitochondrion membrane.

Tissue Specificity:

Kidney.

Product Detail:**DISEASE:**

Defects in CYP27B1 are the cause of rickets vitamin D-dependent type 1A (VDDR1A) [MIM:264700]; also known as pseudovitamin D deficiency rickets (PDDR). A disorder caused by a selective deficiency of the active form of vitamin D (1,25-dihydroxyvitamin D3) and resulting in defective bone mineralization and clinical features of rickets.

Similarity:

Belongs to the cytochrome P450 family.

SWISS:

O15528

Gene ID:

1594

Database links:

[Entrez Gene: 1594](#) Human

[Omim: 609506](#) Human

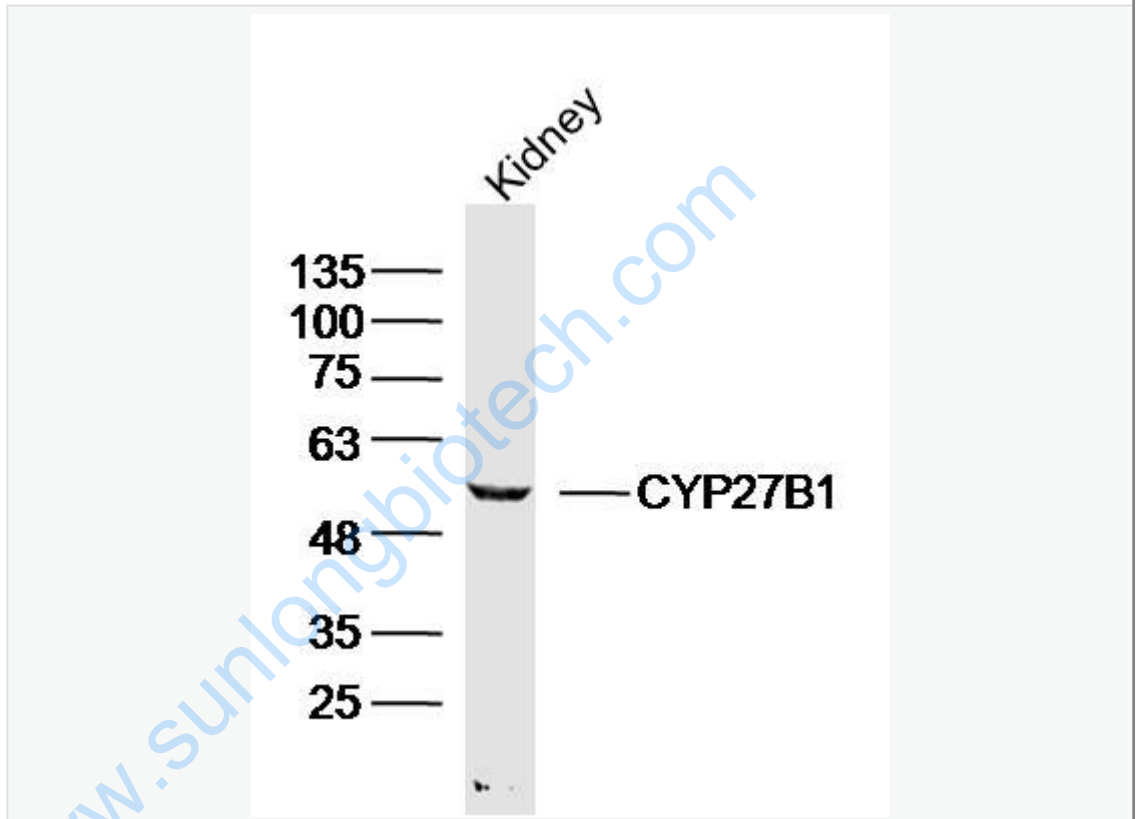
[SwissProt: O15528](#) Human

[Unigene: 524528](#) Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample: Kidney (Mouse) Lysate at 40 ug

Primary: Anti- CYP27B1 (SL14146R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 57kD

Observed band size: 57kD