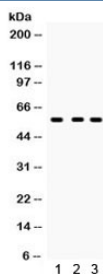


CYP27B1 Antibody (R31812)

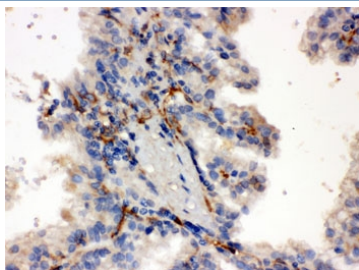
Catalog No.	Formulation	Size
R31812	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

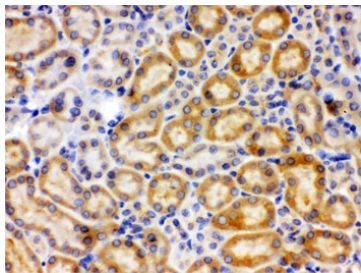
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	O15528
Localization	Cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This CYP27B1 antibody is available for research use only.



Western blot testing of 1) rat kidney, 2) mouse kidney and 3) 293 lysate with CYP27B1 antibody. Predicted/observed molecular weight ~57 kDa.



IHC testing of FFPE human kidney cancer tissue with CYP27B1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE rat kidney with CYP27B1 antibody. HIER: Boil the paraffin sections in pH 6, 10mM citrate buffer for 20 minutes and allow to cool prior to staining.

Description

CYP27B1 belongs to 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.

Application Notes

Optimal dilution of the CYP27B1 antibody should be determined by the researcher.

Immunogen

Amino acids HFEVQPEPGAAPVRPKTRTVLPERSINLQFLDR of human CYP27B1 were used as the immunogen for the CYP27B1 antibody.

Storage

After reconstitution, the CYP27B1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.