

Basic Information

Product Name	Anti-CYP27B1 Antibody	
Gene Name	CYP27B1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CYP27B1 recombinant protein (Position: R252-R508).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	57 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000

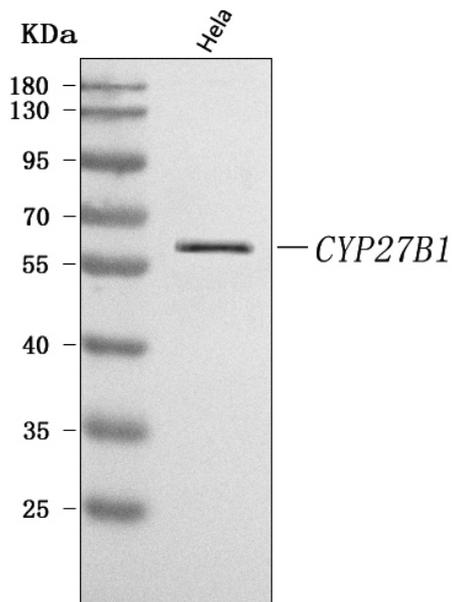
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

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 1 α position. This reaction synthesizes 1 α ,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.

Selected Validation Data



Western blot analysis of anti-CYP27B1 antibody (A01370). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CYP27B1 antigen affinity purified polyclonal antibody (A01370) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CYP27B1 at approximately 57 kDa. The expected band size for CYP27B1 is at 57 kDa.