The cytochrome P450 proteins are monoxygenases 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 XXVII family 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 1,25-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), an autosomal recessive disease characterized by early onset of rickets with hypocalcemia and muscle weakness.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CYP27B1 (human) mapping to 12q14.1; Cyp27b1 (mouse) mapping to 10 D3.

**SOURCE**

CYP27B1 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CYP27B1 of human origin.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.