

## Product datasheet for **TP761160**

### **CYP27B1 (NM\_000785) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Purified recombinant protein of Human cytochrome P450, family 27, subfamily B, polypeptide 1 (CYP27B1), nuclear gene encoding mitochondrial protein, full length, with N-terminal HIS tag, expressed in E. coli, 50ug
<b>Species:</b>	Human
<b>Expression Host:</b>	E. coli
<b>Expression cDNA Clone or AA Sequence:</b>	A DNA sequence from TrueORF clone, RC222840, encoding human full-length CYP27B1
<b>Tag:</b>	N-His
<b>Predicted MW:</b>	56.3 kDa
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	50 mM Tris-HCl, pH 8.0, 8 M urea
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_000776</a>
<b>Locus ID:</b>	1594
<b>UniProt ID:</b>	<a href="#">O15528</a>
<b>RefSeq Size:</b>	2503
<b>Cytogenetics:</b>	12q14.1
<b>RefSeq ORF:</b>	1524
<b>Synonyms:</b>	CP2B; CYP1; CYP1alpha; CYP27B; P450c1; PDDR; VDD1; VDDR; VDDRI; VDR



[View online »](#)

**Summary:**

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 1 $\alpha$  position. This reaction synthesizes 1 $\alpha$ ,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]

**Protein Families:**

Druggable Genome, P450

**Protein Pathways:**

Metabolic pathways, Steroid biosynthesis

**Product images:**