

Product datasheet for RC222840L1

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

CYP27B1 (NM_000785) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CYP27B1 (NM_000785) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: CYP27B1

Synonyms: CP2B; CYP1; CYP1alpha; CYP27B; P450c1; PDDR; VDD1; VDDR; VDDRI; VDR

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

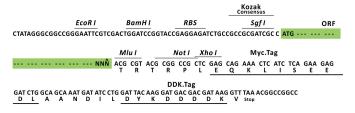
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC222840).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_000785

ORF Size: 1524 bp





CYP27B1 (NM_000785) Human Tagged Lenti ORF Clone - RC222840L1

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 000785.3</u>

RefSeq Size: 2503 bp
RefSeq ORF: 1527 bp
Locus ID: 1594

UniProt ID: <u>O15528</u>

Cytogenetics:

Protein Families: Druggable Genome, P450

Protein Pathways: Metabolic pathways, Steroid biosynthesis

12q14.1

MW: 56.3 kDa

Gene 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-

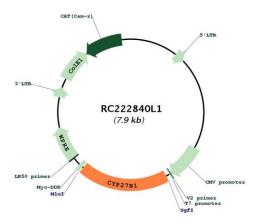
hydroxyvitamin D3 at the 1alpha position. This reaction synthesizes 1alpha,25-

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

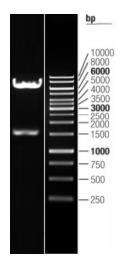
result in vitamin D-dependent rickets type I. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC222840L1



Double digestion of RC222840L1 using Sgfl and Mlul $\,$