

Product datasheet for RC202712L1

OriGene Technologies, Inc.

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Phospholamban (PLN) (NM_002667) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Phospholamban (PLN) (NM_002667) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Phospholamban

Synonyms: CMD1P; CMH18; PLB

Mammalian Cell None

Selection:

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

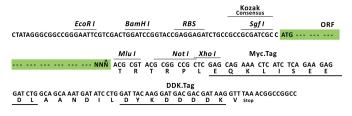
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC202712).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_002667

ORF Size: 156 bp



Phospholamban (PLN) (NM_002667) Human Tagged Lenti ORF Clone - RC202712L1

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 002667.2</u>

 RefSeq Size:
 1742 bp

 RefSeq ORF:
 159 bp

 Locus ID:
 5350

 UniProt ID:
 P26678

Cytogenetics: 6q22.31

Protein Families: Transmembrane

Protein Pathways: Calcium signaling pathway, Dilated cardiomyopathy

MW: 6.1 kDa

Gene Summary: The protein encoded by this gene is found as a pentamer and is a major substrate for the

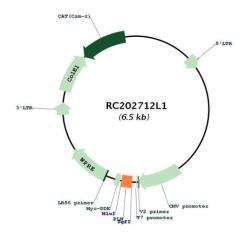
cAMP-dependent protein kinase in cardiac muscle. The encoded protein is an inhibitor of cardiac muscle sarcoplasmic reticulum Ca(2+)-ATPase in the unphosphorylated state, but inhibition is relieved upon phosphorylation of the protein. The subsequent activation of the Ca(2+) pump leads to enhanced muscle relaxation rates, thereby contributing to the inotropic response elicited in heart by beta-agonists. The encoded protein is a key regulator of cardiac

diastolic function. Mutations in this gene are a cause of inherited human dilated cardiomyopathy with refractory congestive heart failure, and also familial hypertrophic

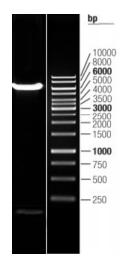
cardiomyopathy. [provided by RefSeq, Apr 2016]



Product images:



Circular map for RC202712L1



Double digestion of RC202712L1 using Sgfl and Mlul $\,$