

Product datasheet for RC206942L3

PLD6 (NM_178836) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PLD6 (NM_178836) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: PLD6

Synonyms: ZUC

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC206942).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_178836

ORF Size: 756 bp



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PLD6 (NM_178836) Human Tagged Lenti ORF Clone - RC206942L3

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 178836.2</u>, <u>NP 849158.1</u>

 RefSeq Size:
 2591 bp

 RefSeq ORF:
 759 bp

 Locus ID:
 201164

 UniProt ID:
 Q8N2A8

 Cytogenetics:
 17p11.2

Protein Families: Transmembrane

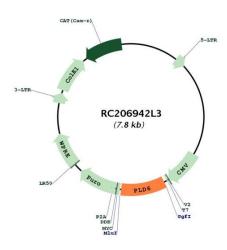
MW: 28.2 kDa



Gene Summary:

Endonuclease that plays a critical role in PIWI-interacting RNA (piRNA) biogenesis during spermatogenesis. piRNAs provide essential protection against the activity of mobile genetic elements (By similarity), piRNA-mediated transposon silencing is thus critical for maintaining genome stability, in particular in germline cells when transposons are mobilized as a consequence of wide-spread genomic demethylation (By similarity). Has been proposed to act as a cardiolipin hydrolase to generate phosphatidic acid at mitochondrial surface (By similarity). Although it cannot be excluded that it can act as a phospholipase in some circumstances, it should be noted that cardiolipin hydrolase activity is either undetectable in vitro, or very low (PubMed:21397848). In addition, cardiolipin is almost exclusively found on the inner mitochondrial membrane, while PLD6 localizes to the outer mitochondrial membrane, facing the cytosol (PubMed:21397848). Has been shown to be a backbone-nonspecific, single strand-specific nuclease, cleaving either RNA or DNA substrates with similar affinity. Produces 5' phosphate and 3' hydroxyl termini, suggesting it could directly participate in the processing of primary piRNA transcripts (By similarity). Also acts as a regulator of mitochondrial shape through facilitating mitochondrial fusion (PubMed:17028579, PubMed:26711011).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC206942L3