

Product datasheet for RC200442L2

OriGene Technologies, Inc.

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PLCG 2 (PLCG2) (NM_002661) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PLCG 2 (PLCG2) (NM_002661) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PLCG 2

Synonyms: APLAID; FCAS3; PLC-gamma-2; PLC-IV

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

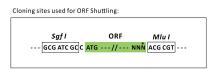
E. coli Selection: Chloramphenicol (34 ug/mL)

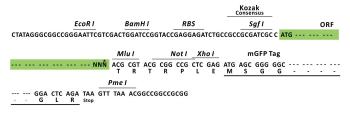
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC200442).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_002661

ORF Size: 3795 bp



PLCG 2 (PLCG2) (NM_002661) Human Tagged Lenti ORF Clone - RC200442L2

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 002661.2</u>

 RefSeq Size:
 8707 bp

 RefSeq ORF:
 3798 bp

 Locus ID:
 5336

 UniProt ID:
 P16885

Cytogenetics: 16q23.3

Domains: C2, PI-PLC-X, SH2, SH3, PI-PLC-Y, PH

Protein Families: Druggable Genome

Protein Pathways: B cell receptor signaling pathway, Calcium signaling pathway, Epithelial cell signaling in

Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Glioma, Inositol phosphate metabolism, Leukocyte transendothelial migration, Metabolic pathways, Natural killer cell mediated cytotoxicity,

Neurotrophin signaling pathway, Non-small cell lung cancer, Pathways in cancer,

Phosphatidylinositol signaling system, VEGF signaling pathway, Vibrio cholerae infection

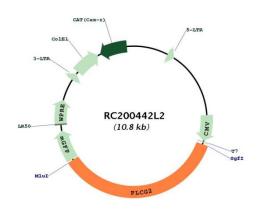
MW: 147.9 kDa



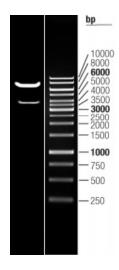
Gene Summary:

The protein encoded by this gene is a transmembrane signaling enzyme that catalyzes the conversion of 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate to 1D-myo-inositol 1,4,5-trisphosphate (IP3) and diacylglycerol (DAG) using calcium as a cofactor. IP3 and DAG are second messenger molecules important for transmitting signals from growth factor receptors and immune system receptors across the cell membrane. Mutations in this gene have been found in autoinflammation, antibody deficiency, and immune dysregulation syndrome and familial cold autoinflammatory syndrome 3. [provided by RefSeq, Mar 2014]

Product images:



Circular map for RC200442L2



Double digestion of RC200442L2 using Sgfl and Mul