

## Product datasheet for RC216391L3

#### 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

# Phospholipase C gamma 1 (PLCG1) (NM\_182811) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Phospholipase C gamma 1 (PLCG1) (NM 182811) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Phospholipase C gamma 1

Synonyms: NCKAP3; PLC-II; PLC1; PLC148; PLCgamma1

Mammalian Cell

Selection:

Puromycin

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

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

ORF Nucleotide

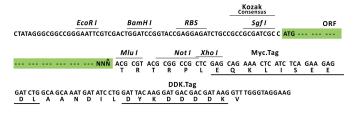
The ORF insert of this clone is exactly the same as(RC216391).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 



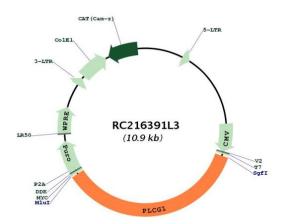


<sup>\*</sup> The last codon before the Stop codon of the ORF.





### Plasmid Map:



**ACCN:** NM\_182811 **ORF Size:** 3870 bp

**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 182811.1</u>

RefSeq Size: 5202 bp RefSeq ORF: 3873 bp



 Locus ID:
 5335

 UniProt ID:
 P19174

 Cytogenetics:
 20q12

**Protein Families:** Druggable Genome

Protein Pathways: 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, Nonsmall cell lung cancer, Pathways in cancer, Phosphatidylinositol signaling system, T cell

receptor signaling pathway, VEGF signaling pathway, Vibrio cholerae infection

**MW:** 148.4 kDa

**Gene Summary:** The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and

diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. For example, when activated by SRC, the encoded protein causes the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul

2008]