

## **Product datasheet for RC222192L1**

#### OriGene Technologies, Inc.

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## PI 3 Kinase Class 2A (PIK3C2A) (NM 002645) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: PI 3 Kinase Class 2A (PIK3C2A) (NM\_002645) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: PI 3 Kinase Class 2A

Synonyms: CPK; OCSKD; PI3-K-C2(ALPHA); PI3-K-C2A; PI3K-C2-alpha; PI3K-C2alpha

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(RC222192).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_002645

ORF Size: 5058 bp



### PI 3 Kinase Class 2A (PIK3C2A) (NM\_002645) Human Tagged Lenti ORF Clone - RC222192L1

**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 002645.1</u>

 RefSeq Size:
 5061 bp

 RefSeq ORF:
 5061 bp

 Locus ID:
 5286

 UniProt ID:
 000443

Cytogenetics: 11p15.1

**Domains:** C2, PI3K\_rbd, PI3\_PI4\_kinase, PI3Ka, PX, PI3K\_C2

**Protein Families:** Druggable Genome

Protein Pathways: Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system

**MW:** 190.5 kDa

Gene Summary: The protein encoded by this gene belongs to the phosphoinositide 3-kinase (PI3K) family. PI3-

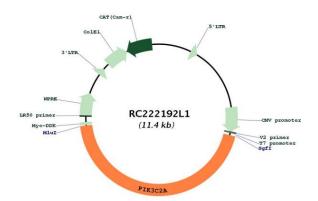
kinases play roles in signaling pathways involved in cell proliferation, oncogenic

transformation, cell survival, cell migration, and intracellular protein trafficking. This protein contains a lipid kinase catalytic domain as well as a C-terminal C2 domain, a characteristic of class II PI3-kinases. C2 domains act as calcium-dependent phospholipid binding motifs that mediate translocation of proteins to membranes, and may also mediate protein-protein interactions. The PI3-kinase activity of this protein is not sensitive to nanomolar levels of the inhibitor wortmanin. This protein was shown to be able to be activated by insulin and may be

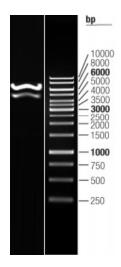
involved in integrin-dependent signaling. [provided by RefSeq, Jul 2008]



# **Product images:**



Circular map for RC222192L1



Double digestion of RC222192L1 using Sgfl and Mlul  $\,$