

Product datasheet for RC205317L4

OriGene Technologies, Inc.

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PI 3 Kinase Class 3 (PIK3C3) (NM_002647) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PI 3 Kinase Class 3 (PIK3C3) (NM_002647) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: PI 3 Kinase Class 3

Synonyms: hVps34; VPS34; Vps34

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

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

ORF Nucleotide

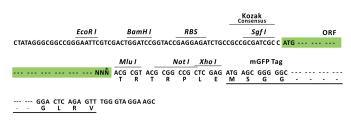
The ORF insert of this clone is exactly the same as(RC205317).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_002647

ORF Size: 2661 bp



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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 002647.2</u>

RefSeq Size: 3083 bp
RefSeq ORF: 2664 bp
Locus ID: 5289

UniProt ID: Q8NEB9

Cytogenetics: 18q12.3

Domains: PI3 PI4 kinase, PI3Ka, PI3K C2

Protein Families: Druggable Genome

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

Regulation of autophagy

MW: 101.4 kDa

Gene Summary: Catalytic subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-

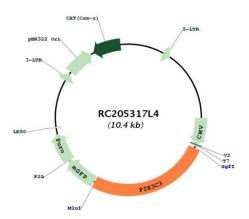
phosphate; different complex forms are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in

maturation of autophagosomes and endocytosis. Involved in regulation of degradative endocytic trafficking and required for the abcission step in cytokinesis, probably in the context of PI3KC3-C2 (PubMed:20643123, PubMed:20208530). Involved in the transport of lysosomal enzyme precursors to lysosomes. Required for transport from early to late

endosomes (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC205317L4