

# **Product datasheet for RC215433L1**

### 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

OriGene Technologies, Inc.

## PIK3CB (NM\_006219) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** PIK3CB (NM\_006219) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: PIK3CB

Synonyms: P110BETA; PI3K; PI3KBETA; PIK3C1

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

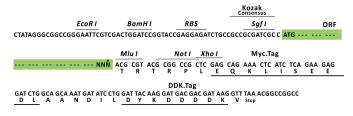
**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC215433).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_006219

ORF Size: 3210 bp



#### PIK3CB (NM\_006219) Human Tagged Lenti ORF Clone - RC215433L1

**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 006219.1</u>

 RefSeq Size:
 3213 bp

 RefSeq ORF:
 3213 bp

 Locus ID:
 5291

 UniProt ID:
 P42338

Cytogenetics: 3q22.3

**Domains:** PI3K\_rbd, PI3\_PI4\_kinase, PI3Ka, PI3K\_C2, PI3K\_p85B

**Protein Families:** Druggable Genome

**Protein Pathways:** Acute myeloid leukemia, Apoptosis, B cell receptor signaling pathway, Chemokine signaling

pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Glioma, Inositol phosphate metabolism, Insulin signaling pathway, Jak-STAT signaling pathway, Leukocyte transendothelial migration, Melanoma, mTOR signaling

pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Phosphatidylinositol signaling system, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton,

Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Toll-like

receptor signaling pathway, Type II diabetes mellitus, VEGF signaling pathway

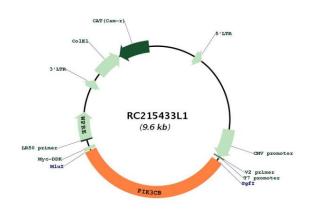
**MW:** 122.6 kDa



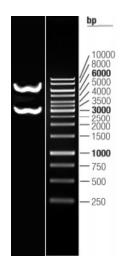
#### **Gene Summary:**

This gene encodes an isoform of the catalytic subunit of phosphoinositide 3-kinase (PI3K). These kinases are important in signaling pathways involving receptors on the outer membrane of eukaryotic cells and are named for their catalytic subunit. The encoded protein is the catalytic subunit for PI3Kbeta (PI3KB). PI3KB has been shown to be part of the activation pathway in neutrophils which have bound immune complexes at sites of injury or infection. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2011]

### **Product images:**



Circular map for RC215433L1



Double digestion of RC215433L1 using Sgfl and Mlul  $\,$