

Product datasheet for RC213112L1V

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

PI 3 Kinase catalytic subunit alpha (PIK3CA) (NM_006218) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: PI 3 Kinase catalytic subunit alpha (PIK3CA) (NM_006218) Human Tagged ORF Clone Lentiviral

Particle

Symbol: PIK3CA

Synonyms: CLAPO; CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; PI3K; PI3K-alpha

Mammalian Cell

Selection:

None

Vector: pLenti-C-Myc-DDK (PS100064)

 Tag:
 Myc-DDK

 ACCN:
 NM_006218

ORF Size: 3204 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC213112).

OTI Disclaimer:

Sequence:

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.

RefSeq: <u>NM 006218.2</u>

 RefSeq Size:
 3724 bp

 RefSeq ORF:
 3207 bp

 Locus ID:
 5290

 UniProt ID:
 P42336

 Cytogenetics:
 3q26.32

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: 124.7 kDa

Gene Summary: Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa

catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P2. This gene has been found to be oncogenic and has been implicated in cervical cancers. A pseudogene of this gene has

been defined on chromosome 22. [provided by RefSeq, Apr 2016]