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Product datasheet for RC222249

PIK3R5 (NM_014308) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIK3R5 (NM_014308) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PIK3R5
Synonyms:	F730038I15Rik; FOAP-2; p101; P101-PI3K
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC222249 representing NM_014308
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGCCAGGGGCCACGACATGCACGGAGGACCGCATCCAGCATGCCCTGGAACGCTGCCTGCATGGAC
TCAGCCTCAGCCGCCGCTCCACCTCCTGGTCAGCTGGGCTGTGTCTGAACTGCTGGAGCCTCCAGGAGCT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>RC222249 representing NM_014308
Red=Cloning site Green=Tags(s)

MQPGATTCTEDRIQHALERCLHGLSLSRRSTSWSAGLCLNCWSLQELVSRDPGHFLILLEQILQKTREVQ
EKGTYDLLTPLALLFYSTVLCTPHFPPDSDLLLKAASTYHRFLTWPVPYCSICQELLTFIDAELKAPGIS
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VPGLHCRLQAKTLAELEDIFTETAEAQELASGIGDAAEARRWLRTKLQAVGEKAGFPGVLDTAKPGKLHT
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EVLCQQSLKAEAQALEGSPTQLPILADMLLYYCRFAARPVLLQVYQTELTFITGEKTTEIFIHSLELGHS
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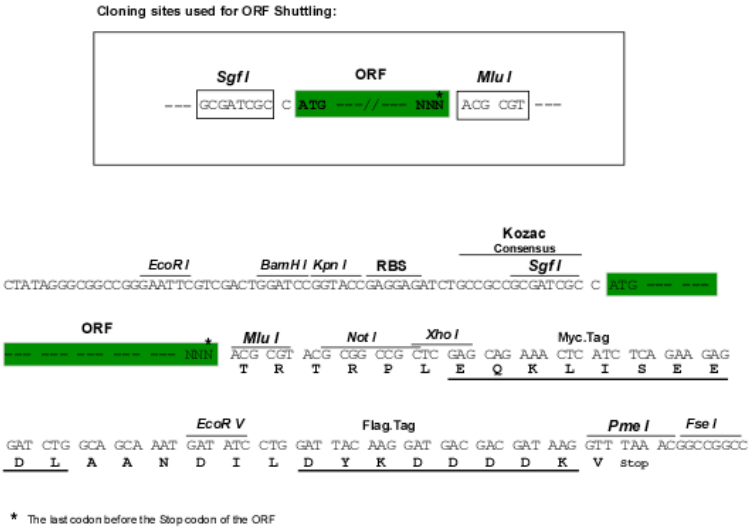
PEKSDLSSPPQTPPDLPAQAAPDLCSLLCLPIMTFSGALP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6166_g03.zip

Restriction Sites: SgfI-MluI

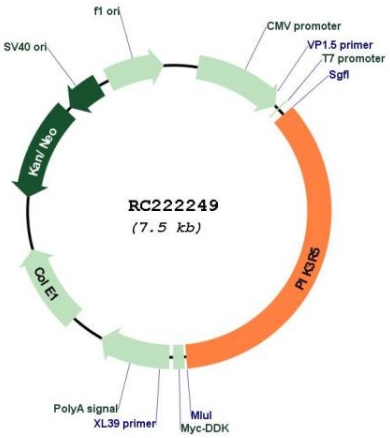
Cloning Scheme:



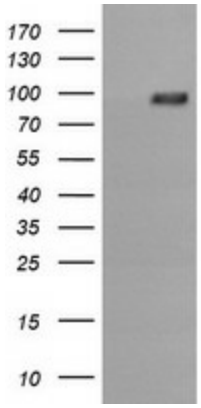
ACCN:	NM_014308
ORF Size:	2640 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	NM_014308.3
RefSeq Size:	3255 bp
RefSeq ORF:	2643 bp
Locus ID:	23533
UniProt ID:	Q8WYR1
Cytogenetics:	17p13.1
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, 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:	97.2 kDa

Gene Summary: Phosphatidylinositol 3-kinases (PI3Ks) phosphorylate the inositol ring of phosphatidylinositol at the 3-prime position, and play important roles in cell growth, proliferation, differentiation, motility, survival and intracellular trafficking. The PI3Ks are divided into three classes: I, II and III, and only the class I PI3Ks are involved in oncogenesis. This gene encodes the 101 kD regulatory subunit of the class I PI3K gamma complex, which is a dimeric enzyme, consisting of a 110 kD catalytic subunit gamma and a regulatory subunit of either 55, 87 or 101 kD. This protein recruits the catalytic subunit from the cytosol to the plasma membrane through high-affinity interaction with G-beta-gamma proteins. Multiple alternatively spliced transcript variants encoding two distinct isoforms have been found. [provided by RefSeq, Oct 2011]

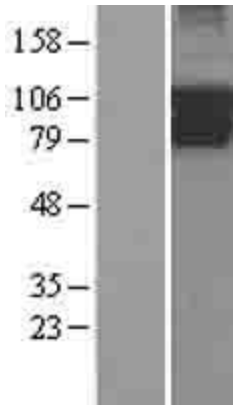
Product images:



Circular map for RC222249



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PIK3R5 (Cat# RC222249, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PIK3R5(Cat# [TA505893]). Positive lysates [LY402310] (100ug) and [LC402310] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY428223]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226818] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).