

Product datasheet for **RC238464**

PI 3 Kinase p55 gamma (PIK3R3) (NM_001303428) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PI 3 Kinase p55 gamma (PIK3R3) (NM_001303428) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PIK3R3
Synonyms:	p55; p55-GAMMA; p55PIK
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238464 representing NM_001303428
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCCTGTGTCCCCCTCCCGCGCGGTTGGGTGGCGCCTCAGCGGCGGATGTACAATACGGTGTGGA
 GTATGGACCGCGATGACGCAGACTGGAGGGAGGTGATGATGCCCTATTTCGACAGAACTGATATTTTATAT
 TGAAATGGATCCTCCAGCTCTTCCACCAAAGCCACCTAAGCCAATGACTTCAGCAGTTCCAAATGGAATG
 AAGGACAGTTCTGTTTCTTTCAGGATGCAGAATGGTACTGGGGGATATTTCAAGGGAGGAGGTAATG
 ACAAAATGCGGGATATGCCAGATGGGACCTTCTTGGTCCGAGATGCCTCAACAAAATGCAGGGAGATTA
 TACTTTGACTTTGCGGAAGGGAGGCAATAATAAGTTAATAAAGATCTATCACCGGATGGTAAATATGGC
 TTTTCTGATCCTCTGACATTTAATTCGTTGGTGGAGCTCATTAACTACTACCATGAATCTCTTGCTC
 AGTACAATCCAACTTGATGTGAAGCTGATGTACCCAGTGTCCAGATACCAACAGGATCAGTTGGTAAA
 AGAAGATAATATTGATGCAGTAGGTAAGAACTGCAAGAATACCACTCTCAGTATCAGGAGAAGAGTAAA
 GAGTATGATAGGCTGATGAAGAATATACTAGAACATCCAGGAAATACAGATGAAGAGGACTGCAATAG
 AAGCTTTAATGAAACAATTAATAATTTGAAGAGCAGTGTACACACAAGAACAACATAGCAAAGAATA
 TATTGAGCGATTCGAGAGAGGGGATGAAAAGGAGATTGAACGAATTATGATGAATTATGATAAATTG
 AAATCACGTCTGGGTGAGATTATGATAGCAAAATGCGTCTAGAGCAGGATTTGAAGAATCAAGCTTTGG
 ACAACCGAGAAATAGATAAAAAAATGAATAGCATCAAACCTGACCTGATCCAGCTGCGAAAGATCCGAGA
 TCAACACCTTGTATGGCTCAATCACAAGGAGTGAGACAGAAACGCTGAATGTCTGGCTGGGAATTAAG
 AATGAGGATGCTGATGAGAACTATTTATCAATGAGGAAGATGAAAACCTGCCCATATGATGAGAAAA
 CCTGGTTTGTGAGGATATCAATCGAGTACAAGCAGAGGACTTGTCTTATGGGAAACCTGATGGTGCATT
 CTTAATTCGTGAGAGTAGCAAGAAAGGATGCTATGCTTGTCTGTGGTGGCCGATGGGGAAGTGAAGCAC
 TGTGTGATCTACAGCACTGCTCGGGCTATGGCTTGCAGAGCCCTACAACCTGTACAGCTCTCTGAAGG
 AGCTAGTGTCCATTACCAGCAGACATCCTTGGTTGAGCACAACGACTCCCTCAACGTCAGGCTTGCCTA
 CCCTGTTTCATGCACAGATGCCCTCGCTTTCAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238464 representing NM_001303428
 Red=Cloning site Green=Tags(s)

MPAVPPPGAVGWRLSGAMYNTVWSMDRDDADWREVMMPYSTELEFYIEMDPPALPPKPPKPMTSAPVNGM
 KDSSVSLQDAEWYWGDISREEVNDKLRDMPDGTFVLRDASTKMQGDYTLTLRKGGNNKLIKIYHRDGKYG
 FSDPLTFNSVVELINHYHHESLAQYNPKLDVKLMYPVSRVYQDQLVKEDNIDAVGKQLQEYHSQYQEKSK
 EYDRLYEEYTRTSQEIQMKRTAIEAFNETIKIFEEQCHTQEHSKEYIERFRREGNEKEIERIMMNYDKL
 KSRLGEIHDSKMRLEQDLKNQALDNREIDKMNKSIKPDLIQLRKIRDQHLVWLNHKGVRQKRLNVWLGIK
 NEDADENYFINEEDENLPHYDEKTFWVEDINRVQAEDLLYGKPDGAFIRESSKKGCYACSVVADGEVKH
 CVIYSTARGYGF AEPYNLYSSLKELVLHYQQTSLVQHNDLNVRLAYPVHAQMPSLCR

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

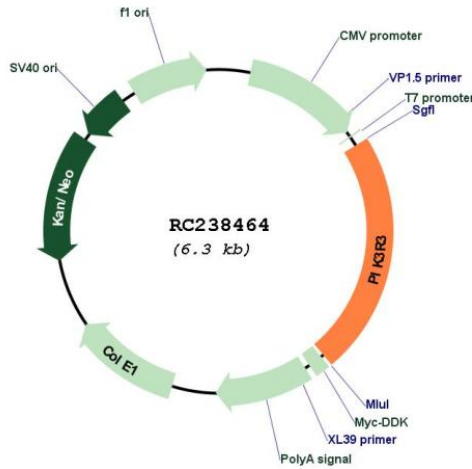
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:

NM_001303428

ORF Size:

1434 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:	<ol style="list-style-type: none">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_001303428.1 , NP_001290357.1
RefSeq Size:	5037 bp
RefSeq ORF:	1437 bp
Locus ID:	8503
Cytogenetics:	1p34.1
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:	56.5 kDa
Gene Summary:	Phosphatidylinositol 3-kinase (PI3K) phosphorylates phosphatidylinositol and similar compounds, which then serve as second messengers in growth signaling pathways. PI3K is composed of a catalytic and a regulatory subunit. The protein encoded by this gene represents a regulatory subunit of PI3K. The encoded protein contains two SH2 domains through which it binds activated protein tyrosine kinases to regulate their activity. [provided by RefSeq, Jun 2016]