

Product datasheet for **RG202039**

PI 3 Kinase p55 gamma (PIK3R3) (NM_003629) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PI 3 Kinase p55 gamma (PIK3R3) (NM_003629) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PI 3 Kinase p55 gamma
Synonyms:	p55; p55-GAMMA; p55PIK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG202039 representing NM_003629
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTACAATACGGTGTGGAGTATGGACCGCATGACGCAGACTGGAGGGAGGTGATGATGCCTATTCGA
 CAGAACTGATATTTTATATTGAAATGGATCCTCCAGCTCTCCACCAAAGCCACCTAAGCCAATGACTTC
 AGCAGTCCAAATGGAATGAAGGACAGTTCTGTTTCTTTCAGGATGCAGAATGGTACTGGGGGATATT
 TCAAGGGAGGAGGTAAATGACAAATTGCGGGATATGCCAGATGGGACCTTCTTGGTCCGAGATGCCTCAA
 CAAAAATGCAGGGAGATTACTTTGACTTTGCGGAAGGGAGGCAATAATAAGTTAATAAAGATCTATCA
 CCGGGATGGTAAATATGGCTTTTCTGATCCTCTGACATTAATCCGTGGTGGAGCTCATTAACTACTAT
 CACCATGAATCTTGTCTCAGTACAATCCAACTTGATGTGAAGCTGATGTACCCAGTGTCCAGATACC
 AACAGGATCAGTTGGTAAAAGAAGATAATTGATGCAGTAGGTAAGGACTGCAAGAATACCACTCTCA
 GTATCAGGAGAAGAGTAAAGATATGATAGGCTGTATGAAGAATACTAGAACATCCAGGAAATACAG
 ATGAAGAGGACTGCAATAGAAGCTTTAATGAAACAATTAATAATTTGAAGAGCAGTGTACACACAAG
 AACACATAGCAAAGAATATATTGAGCGATTCGACAGAGAGGGGAATGAAAAGGAGATTGAACGAATTAT
 GATGAATTATGATAAATTGAAATCACGCTGGGTGAGATTCATGATAGCAAAATGCGTCTAGAGCAGGAT
 TTGAAGAATCAAGCTTTGGACAACCGAGAAATAGATAAAAAATGAATAGCATCAAACCTGACCTGATCC
 AGCTGCGAAAGATCCGAGATCAACACCTTGATGGCTCAATCACAAGGAGTGAGACAGAAACCGCTGAA
 TGTCTGGCTGGGAATTAAGAATGAGGATGCTGCTGAGAATTTTTATCAATGAGGAAGATGAAAACCTG
 CCCATTATGATGAGAAAACCTGGTTTGTGAGGATATCAATCGAGTACAAGCAGAGGACTTGCTTTATG
 GAAACCTGATGGTGCATTCTTAATTCGTGAGAGTAGCAAGAAAGGATGCTATGCTTGTGTTGGTGGC
 CGATGGGGAAGTGAAGCACTGTGTGATCTACAGCACTGCTCGGGGCTATGGCTTTGCAGAGCCCTACAAC
 CTGTACAGCTCTCTGAAGGAGCTAGTGCTCCATTACCAGCAGACATCCTTGGTTCAGCACACGACTCCC
 TCAACGTCAGGCTTGCTACCCTGTTTCATGCAGATGCCCTCGCTTTGCAGA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG202039 representing NM_003629
 Red=Cloning site Green=Tags(s)

MYNTVWSMDRDDADWREVMMPYSTELEFYIEMDPPALPPKPPKPMTSAPVPMGMDSSVSLQDAEWYWGDI
 SREEVNDKLRDMPDGTFLVRDASTKMQGDYTLTLRKGGNNKLIKIYHRDGKYGFSDPLTFNSVVELINHY
 HHESLAQYNPKLDVKLMYPVSRVYQDQLVKEDNIDAVGKKLQYHSQYQEKSKYDRLYEEYTRTSQEIQ
 MKRTAIEAFNETIKIFEEQCHTQEQHSKEYIERFRREGNEKEIERIMMNYDKLKSRLGEIHDSKMRLEQD
 LKNQALDNREIDKKMNSIKPDLIQLRKIRDQHLVWLNHKGVRQKRLNVWLGKKNEDAAENYFINEEDENL
 PHYDEKTFWVEDINRVQAEDLLYGKPDGAFIRESKKGCYACSVVADGEVYKHCVIYSTARGYGF AEPYN
 LYSSLKELVLHYQQTSLVQHNSLNVRLAYPVHAQMPSLCR

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_003629

ORF Size: 1383 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_003629.2](#), [NP_003620.2](#)

RefSeq Size: 5621 bp

RefSeq ORF: 1386 bp

Locus ID: 8503

UniProt ID: [Q92569](#)

Cytogenetics: 1p34.1

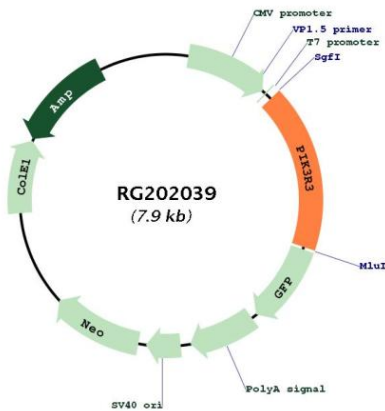
Domains: SH2

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

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]

Product images:



Circular map for RG202039