

Product datasheet for **RG217086**

PIK3C2G (NM_004570) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIK3C2G (NM_004570) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PIK3C2G
Synonyms:	PI3K-C2-gamma; PI3K-C2GAMMA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG217086 representing NM_004570 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGCATATTCTTGGCAAACGGATCCAAATCCTAATGAATCACACGAAAAGCAGTATGAACACCAAGAAT
TTCTCTTTGTAATCAACCCATTCTTCTAGCCAAGTCAGTCTGGGTTTTGATCAGATAGTAGATGAGAT
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CAGCTAATCAATGTCTACTGTAACAGCTTTTATGCAGATTTTCAGCCTGTAATGTACCTAGATGCACTT
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CCACTCGATAAAGAAAAATGGTATCCATTAGGAAACAGTATAATT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG217086 representing NM_004570
 Red=Cloning site Green=Tags(s)

MAYSWQTDPNPNESHEKQYEHQEFLLVFNQPHSSSQVSLGFDQIVDEISGKIPHYESEIDENTFFVPTAPK
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 SILALSFTSLDKINLEKELEENHNHYHIGFESSIPTNSSFS SDFMPKEENKRSGHVNIVEPSLMLLKGS
 LQPGMWESTWQKNIESIGCSIQLVEVPQSNTSLASFCNKVKKIRERYHAADVNFNSGKIWSTTTAFPYQ
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 KTQENVYNIIEEVKIKCSVLGCVETKQITDAVNELSLILQRKGENFYQSSETS AKGLIEKVTTELSTSIY
 QLINVYCSFYADFQPVNVPRCTSYLNPGLPSHLSFTVYAAHNIPETWVHSYKAFSFTCWLTYAGKKLCQ
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 GSMLSFMTLQSEPPVEMITPGVWDVSPSPVTLQIDFPATGWEYMKPDSEENRSNLEEPLKECIKHIALR
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 SFPDQEIRKVAVQQLDNLLNDELLEYLPQLVQAVKFEWNLESPLVQLLLHRSLSQIQVAHRLYWLLKNAE
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 SHEVTNSDCVLSFFLSEAVQQTVEESSPVYLGEKFPDKKPKVQLVISYEDVKLTILVKHMKNIHLPD GSA
 PSAHVEFYLLPYPSEVRRRKT KSVPKCTDPTYNEIVVYDEVTE LQGHVLM LIVKSKTVFVGAINIRLCSV
 PLDKWKYPLGNSII

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:

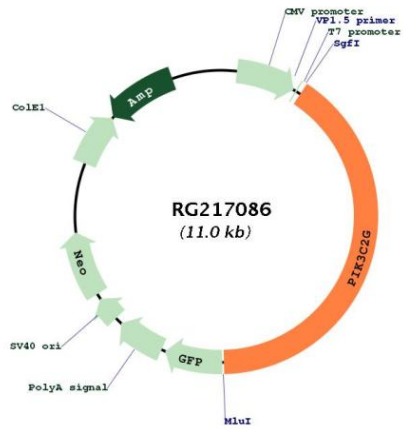


ACCN: NM_004570

ORF Size: 4344 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_004570.2 , NP_004561.1
RefSeq Size:	4855 bp
RefSeq ORF:	4338 bp
Locus ID:	5288
UniProt ID:	O75747
Cytogenetics:	12p12.3
Domains:	C2, PI3_PI4_kinase, PI3Ka, PX, PI3K_C2
Protein Families:	Druggable Genome
Protein Pathways:	Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system
Gene Summary:	The protein encoded by this gene belongs to the phosphoinositide 3-kinase (PI3K) family. PI3-kinases play roles in signaling pathways involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking. This protein contains a lipid kinase catalytic domain as well as a C-terminal C2 domain, a characteristic of class II PI3-kinases. C2 domains act as calcium-dependent phospholipid binding motifs that mediate translocation of proteins to membranes, and may also mediate protein-protein interactions. This gene may play a role in several diseases, including type II diabetes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

Product images:



Circular map for RG217086