

Product datasheet for **SC120317**

PIK3C2G (NM_004570) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: PIK3C2G (NM_004570) Human Untagged Clone
Tag: Tag Free
Symbol: PIK3C2G
Synonyms: PI3K-C2-gamma; PI3K-C2GAMMA
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_004570 edited
GAGATCGTGTTCATTTTCAGGAAGATATATGCGTCAGGAAAATTTCTATCTTCTTTTGTA
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ACATAGGTTTACATTTGTTTTAATTGTGTGCCTACAGTAAAAGCAGTATTTTAAATGTA
TTTTATAAGAAAGACAATCAAATAAACCTCATCAATTAATCAAAAAAAAAAAAAAAAAA
A
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Restriction Sites:	Please inquire
ACCN:	NM_004570
Insert Size:	4570 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	The ORF of this clone was fully sequenced and found to contain one SNP compared with NM_004570.2.
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:	4347 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]

Transcript Variant: This variant (3) lacks an in-frame exon in the central coding region, compared to variant 1. The encoded isoform (3) is shorter, compared to isoform 1.