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Product datasheet for RC402758

PIK3C2G (NM_004570) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	PIK3C2G (NM_004570) Human Mutant ORF Clone
Mutation Description:	P146L
Affected Codon#:	146
Affected NT#:	437
Nucleotide Mutation:	PIK3C2G Mutant (P146L), Myc-DDK-tagged ORF clone of Homo sapiens phosphoinositide-3-kinase, class 2, gamma polypeptide (PIK3C2G) as transfection-ready DNA
Effect:	Dibees, ype 2, ssoiion wih
Symbol:	PIK3C2G
Synonyms:	PI3K-C2-gamma; PI3K-C2GAMMA
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_004570
ORF Size:	4335 bp
Restriction Sites:	SgfI-MluI
ORF Nucleotide Sequence:	>RC402758 representing NM_004570 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCATATTCTTGGCAAACGGATCCAAATCCTAATGAATCACACGAAAAGCAGTATGAACACCAAGAAT TTCTCTTTGTAAATCAACCCCATTCTTCTAGCCAAGTCAGTCTGGGTTTTGATCAGATAGTAGATGAGAT CAGTGGCAAAATTCCACACTACGAGAGTGAAATTGATGAAAACACCTTTTTTGTGCCCACTGCACCAAAA TGGGACTCAACAGGGCATTCATTAAATGAAGCACACCAAATATCCTTGAATGAATTCACTTCTAAAAGCC GTGAACTCTCCTGGCATCAAGTTAGCAAAGCACCAGCAATTGGTTTTAGTCCTTCTGTGTTACCAAAACC TCAAAATACGAATAAAGAATGCTCCTGGGGAAGCCCCATAGGAAAACATCATGGTGCTGATGATTCCAGA TTCAGTATTTTAGCTCTATCATTCACAAGTTTGGATAAAATTAATCTAGAGAAAGAATTAGAAAATGAAA

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Protein Sequence:

>RC402758 representing NM_004570
Red=Cloning site Green=Tags(s)

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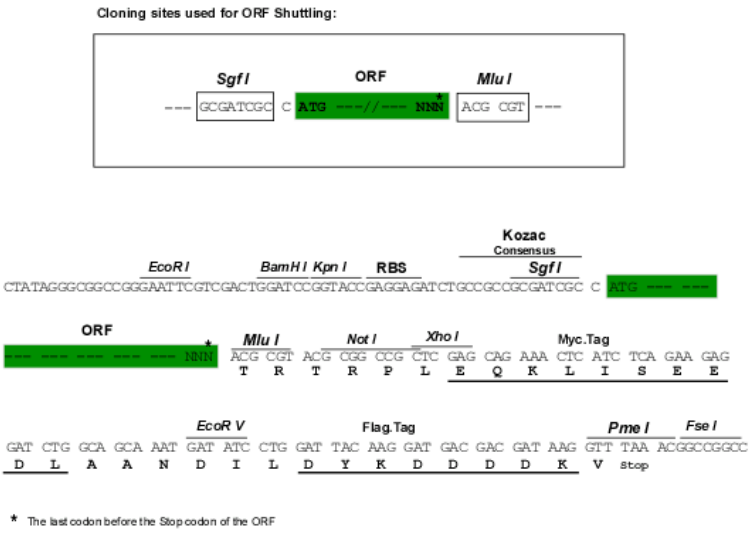
Restriction Sites: SgfI-MluI

Cloning Scheme:



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).
RefSeq:	NP_004561
RefSeq Size:	4335 bp
RefSeq ORF:	4338 bp
Locus ID:	5288
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
MW:	159 kDa

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]