

Product datasheet for **RG219009**

Phospholipase C beta 2 (PLCB2) (NM_004573) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phospholipase C beta 2 (PLCB2) (NM_004573) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Phospholipase C beta 2
Synonyms:	PLC-beta-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219009 representing NM_004573 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGTCCTGCTCAACCTGTCCTGCTGCCCCCAAGGTGAAGGCCTATCTGAGCCAAGGGGAGCGCTTCA
TCAATGGGATGATGAACTACAGTTGCCTCTCCAGTTATCCTCCGTGTGGATCCTAAGGGCTACTACT
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GCAGGTGAGGGCACAGTGTGGGCTGGCGAGGAAGGGACTGAGCTGGAGGAGGAGGAGGTGGAAGAGGAAG
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

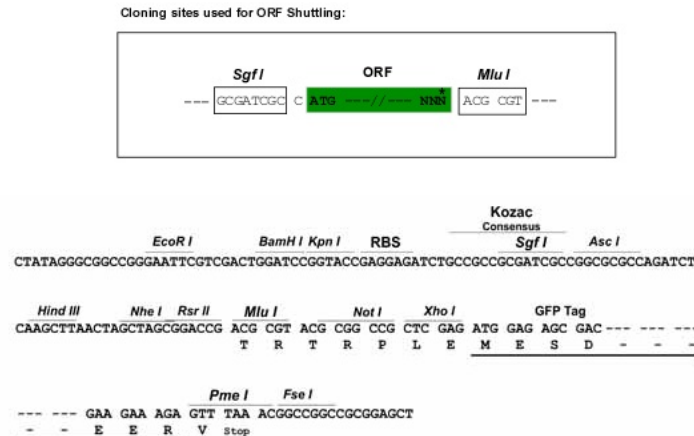
Protein Sequence: >RG219009 representing NM_004573
Red=Cloning site Green=Tags(s)

MSLLNPVLLPPKVKAYLSQGERFIKWDETTVASPVILRVDPKGYLYWYQSKEMEFLDITSIRDTRFG
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RELKDRLELELLRQGEEQYECVLKRKEQHVAEQISKMMELAREKQAAELKALKETSENDTKEMKKKLETK
RLERIQGMTKVTTDKMAQERLKRINNSHIQEVVQVIKQMTENLERHQEKLEEKQAACLEQIREMEKQFQ
KEALAEYEARMKGLEAEVKESVRACLRTCFPSEAKDKPERACECPPELCEQDPLIAKADAQESRL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004573

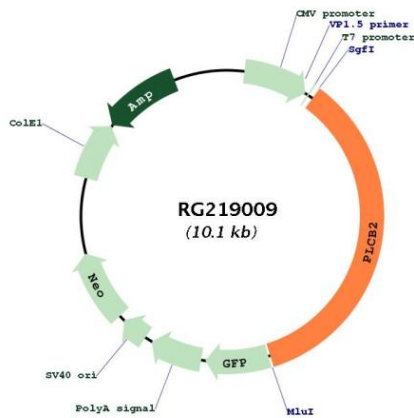
ORF Size: 3555 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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_004573.3
RefSeq Size:	4694 bp
RefSeq ORF:	3558 bp
Locus ID:	5330
UniProt ID:	Q00722
Cytogenetics:	15q15.1
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease, Calcium signaling pathway, Chemokine signaling pathway, Gap junction, GnRH signaling pathway, Huntington's disease, Inositol phosphate metabolism, Long-term depression, Long-term potentiation, Melanogenesis, Metabolic pathways, Phosphatidylinositol signaling system, Taste transduction, Vascular smooth muscle contraction, Wnt signaling pathway

Gene Summary:

The protein encoded by this gene is a phosphodiesterase that catalyzes the hydrolysis of phosphatidylinositol 4,5-bisphosphate to the second messengers inositol 1,4,5-trisphosphate (IP3) and diacylglycerol. The encoded protein is activated by G proteins and has been shown to be involved in the type 2 taste receptor signal transduction pathway. In addition, nuclear factor kappa B can regulate the transcription of this gene, whose protein product is also an important regulator of platelet responses. [provided by RefSeq, Jan 2017]

Product images:



Circular map for RG219009