

Product datasheet for **RC240020**

Phospholipase C beta 2 (PLCB2) (NM_001284298) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phospholipase C beta 2 (PLCB2) (NM_001284298) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLCB2
Synonyms:	PLC-beta-2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC240020 representing NM_001284298 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGTCTCTGCTCAACCCTGTCCTGCTGCCCCCAAGGTGAAGGCCTATCTGAGCCAAGGGGAGCGCTTCA
TCAAATGGGATGATGAACTACAGTTGCCTCTCCAGTTATCCTCCGTGTGGATCCTAAGGGCTACTACTT
ATACTGGACGTATCAAAGTAAGGAGATGGAGTTTCTGGATATCACCAGCATCCGGGATACCTCGTTTGGG
AAGTTTGGCAAGATGCCAAGAGCCAGAAGCTCCGGGACGTCTTCAACATGGACTTTCCTGATAACAGTT
TCTGTGTAAGACACTCACGGTGGTGTCCGGCCCGGACATGGTGGACCTCACCTCCACAACCTTCGTCTC
CTACAAGGAGAAGCTGGGCAAGGCCTGGGCTGAGGACGTACTGGCCCTAGTCAAACATCCGCTGACGGCC
AACGCCTCCCGCAGCACCTTCTGGACAAGATCCTTGTGAAGCTCAAGATGCAGCTCAACTCTGAAGGGA
AGATTCGGTGAAGAAGCTTTTCCAGATGTTTCTGTGACCCGAAGCGGGTGAAGCTGCTCTCAGTGC
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CCCAGGACAAGCTGCTGCTCCACCACGACATGACGCAGCCACTCAATCATTACTTCACTCAACTCGTCCCA
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AGGAGGAGGAGTCAGGAAACCTGGATGAAGAAGAGATTAAGAAGATGCAGTCGGATGAGGGCACAGCGGG
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GAGCCGCCTC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC240020 representing NM_001284298
 Red=Cloning site Green=Tags(s)

MSLLNPVLLPPKVKAYLSQGERFIKWDETTVASPVILRVDPKGYLYWYQSKEMEFLDITSIRDTRFG
 KFAKMPKSQKLRDVFNMDFPDNSFLKTLTVVSGPDMVDLTFHNFVSYKENVKGAWAEDVLALVKHPLTA
 NASRSTFLDKILVKLKMQLNSEGKIPVKNFFQMFADRKRVEAAL SACHLPKGKNDAINPEDFPEPVYKS
 FLMSLCPRPEIDEIFTSYHAKAKPYMTKEHLTKFINQKQRDSRLNSLLFPPARPDQVQGLIDKYEPSGIN
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 SGCRCVELDCWKGKPPDEEPIITHGFTMTDIFFKAEIAEIAESAFKTSYPYIILSFENHVDSRQQAAM
 AEYCRTIFGDMLLTEPLEKFPKPGVPLSPEDLRGKILIKNKNQFSGPTSSSKDTGGEAEGSSPPSAP
 AGEGTWAGEEGTELEEEVEEEEEESGNLDEEIKKMQSDEGTAGLEVTAYEEMSSLVNYIQPTKFVS
 FEFSAQKNRSYVISSFTELKAYDLLSKASVQFVDYNKRQMSRIYPKGTRMDSSNYMPQMFWNAGCQMV
 NFQTMDLPMQNMVFEFNGQSGYLLKHEFMRRPDKQFNPFVSDRIDVVVATTLITVISGQFLSERSVR
 TYVEVELFGLPGDPKRRYRKLSPSTNSINPVWKEEPPVFEKILMPELASLRVAVMEEGNKFLGHRIP
 IPI NALNSGYHHLCLHSESNMPLTMPALFIFLEMKDYIPGAWADLTVALANPIKFFSAHDTKSVKLKEAMGGL
 PEKPFPLASPVASQVNGALAPTSNGSPEPRTASLEELRELKGVVQLQRRHEKELRELERRGARRWELLQ
 RGAAQLAELGPPGVGGVACKLGPKGSRKRSLPREESAGAAPGEGPEGVDGRVRELDKRELELLRQG
 EEQYECVLKRKEQHVAEQISKMMELAREKQAAELKALKETSENDTKEMKKKLETKRLERIQGMTKVTDDK
 MAQERLREINNSHIQEVVQVIKQMTENLERHQEKLEEKQAACLEQIREMEKQFQKEALAEYEARMKGLE
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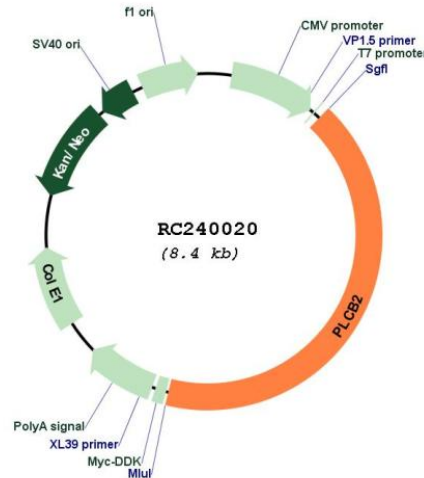
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001284298

ORF Size: 3510 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_001284298.2](#)

RefSeq Size: 4649 bp

RefSeq ORF: 3513 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
MW:	133 kDa
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]