

Product datasheet for **RG230671**

Phospholipase C beta 4 (PLCB4) (NM_001172646) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phospholipase C beta 4 (PLCB4) (NM_001172646) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PLCB4
Synonyms:	ARCND2; PI-PLC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG230671 representing NM_001172646 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAAACCTTATGAATTTAACTGGCAGAAGGAAGTCCCTCCTTTTTGCAAGAAGGAGCAGTTTTTG
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AACATCTTAGAGGACGATAATGAAGAGGAGATCGAAAAGTCTGACCAAGAGGAGGAAGCTCACCCGAAT
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

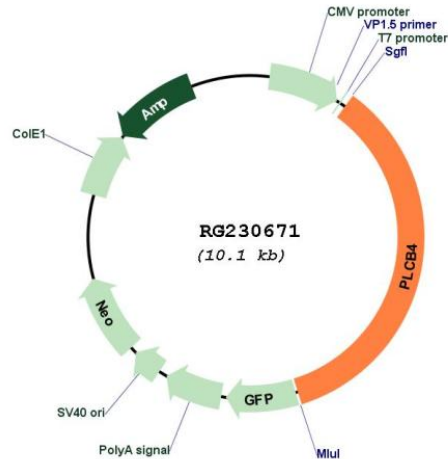
Protein Sequence: >RG230671 representing NM_001172646
 Red=Cloning site Green=Tags(s)

MAKPYEFNWQKEVPSFLQEGAVFDREYEEESVFVEPNCLFKVDEFGFFLTWRSEGKEGQVLECSLINSIRS
 GAIPKDPKILAALEAVGKSENDLEGRIVCVCSGTDLVNISFTYMAENPEVTKQWVEGLRSIIHNFRANN
 VSPMTCCLKKHWMLAFMTNTNGKIPVRSITRTFASGKTEKVI FQALKELGLPSGKNDEIEPTAFSYEKFY
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 LKKKGLISSDGFCRYLMSDENAPVFLDRLELYQEMDHPLAHYFISSSHNTYL TGRQF GGKSSVEMYRQVL
 LAGCRCVELDCWDGKGEDQEQPIITHGKAMCTDILFKDVIQAIKETAFTVTSEYPVILSFENHCSKYQQYKM
 SKYCEDLFGDLLLKQALESHPLEPGRALPSPNDLKRKILIKNKRLKPEVEKKQLEALRSMMEAGESASPA
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 MASYKYVGATTNIHPYLSTMINYAQPVKFQGFHVAEERNIHYNMSSFNESVGLGYLKTHAIEFVNYNKRQ
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 PFSETPVDGVIAATCSVQVISGQFLSDKKIGTYVEVDMYGLPTD TIRKEFRTRMVMNGLNPVYNEESFV
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 AALASGVEAKKGIELIPQVRIEDLKQMKAYL KHLKKQKELNSLKKHAKHEHSTMQKLHCTQVDKI VAQY
 DKEKSTHEKILEKAMKKGGSNCLEMKKETEIKIQTLTSDHKS VKYK EIVAQHTKEWSEMINTHSAEEQEI
 RDLHLSQQCELLKLLINAHEQQTQQLKLSHDRESKEMRAHQAKISMENSKAISQDKSIKKAERERRVR
 ELNSSNTKKFLEERKRLAMKQSKEMDQLKKVQLEHLEFLEKQNEQAKEMQQMVKLEAEMDRRPATVV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
Cloning Scheme:



Plasmid Map:


ACCN: NM_001172646

ORF Size: 3561 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_001172646.2](#)

RefSeq Size: 5640 bp

RefSeq ORF: 3564 bp

Locus ID: 5332

UniProt ID: [Q15147](#)

Cytogenetics: 20p12.3-p12.2

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, Vascular smooth muscle contraction, Wnt signaling pathway
Gene Summary:	The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of many extracellular signals in the retina. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2010]