

## Product datasheet for **RG236514**

### Phospholipase C beta 2 (PLCB2) (NM\_001284299) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | Phospholipase C beta 2 (PLCB2) (NM_001284299) Human Tagged ORF Clone           |
| Tag:                      | TurboGFP   |
| Symbol:                   | PLCB2  |
| Synonyms:                 | PLC-beta-2   |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-AC-GFP (PS100010)  |
| E. coli Selection:        | Ampicillin (100 ug/mL)   |
| ORF Nucleotide Sequence:  | >RG236514 representing NM_001284299.<br>Blue=ORF Red=Cloning site Green=Tag(s) |

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGCTCTGCTCAACCCTGCTCTGCTGCCCCCAAGGTGAAGGCCTATCTGAGCCAAGGGGAGCGCTTC
ATCAAATGGGATGATGAAACTACAGTTGCCTCTCCAGTTATCCTCCGTGTGGATCCTAAGGGCTACTAC
TTATACTGGACGTATCAAAGTAAGGAGATGGAGTTTCTGGATATCACCAGCATCCGGGATACTCGCTTT
GGGAAGTTTGCCAAGATGCCAAGAGCCAGAAGCTCCGGGACGTCTTCAACATGGACTTTCCTGATAAC
AGTTTCTGCTGAAGACTCACGGTGGTGTCCGGCCCGACATGGTGGACCTCACTTCCACAACCTTC
GTCTCTACAAGGAGAACGTGGCAAGGCCTGGGCTGAGGACGTACTGGCCCTAGTCAAACATCCGCTG
ACGGCCAACGCCTCCCGCAGCACCTTCTGGACAAGATCCTTGTGAAGCTCAAGATGCAGCTCAACTCT
GAAGGGAAGATCCGGTGAAGAACCTTTTCCAGATGTTTCTGCTGACCGCAAGCGGGTGAAGCTGCT
CTCAGTGCCTGCCACCTCCCAAGGCAAACCTGGAGGAGCGAGA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

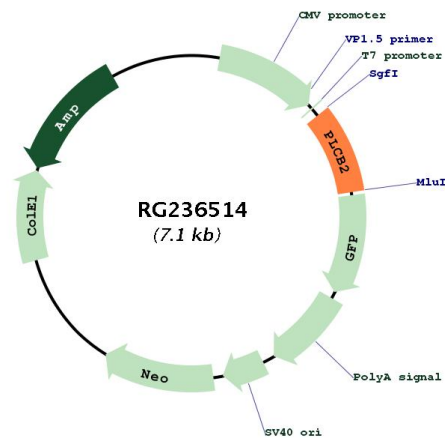
**Protein Sequence:** >Peptide sequence encoded by RG236514  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MSLLNPVLLPPKVKAYLSQGERFIKWDETTVASPVILRVDPKGYLYWYQSKEMEFLDITSIRDTRF
GKFAKMPKSQKLRDVFNMDFPDNSFLKLTLLVSGPDMVDLTFHNFVSYKENVKGAWAEDVLALVKHPL
TANASRSTFLDKILVKLKMQLNSEGKIPVKNFFQMFPADRKRVEAAL SACHLPKGKPGGAR
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLSRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:** Sgfl-MluI



**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001284299

**ORF Size:** 597 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).

|                   |  |
|-------------------|--|
| RefSeq:           | <a href="#">NM_001284299.2</a>   |
| RefSeq Size:      | 1840 bp  |
| RefSeq ORF:       | 600 bp   |
| Locus ID:         | 5330   |
| 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:               | 23.1 kDa   |
| Gene Summary:     | <p>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]</p> |