

## Product datasheet for **RG238045**

### PPP3CB (NM\_001289969) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PPP3CB (NM_001289969) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PPP3CB
Synonyms:	CALNA2; CALNB; CNA2; PP2Bbeta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238045 representing NM_001289969. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGATAGAAGTAGAAGCTCCAATCACAGTGTGTGGTGACATCCATGGCCAATTTTTTGTCTGATGAAA
CTTTTTGAAGTAGGAGGATCACCTGCTAATACACGATACCTTTTTCTTGGCGATTATGTGGCAGAGGT
TATTTTAGTATAGAGTGTGCTTATATTTATGGTTCTGAAGATTCTATACCCAAGCACATTATTTCTT
CTGAGAGGCAACCATGAATGCAGACACCTTACTGAATATTTACCTTAAAGCAGGAATGAAAATTAAG
TATTCGAAAGAGTCTATGAAGCTTGTATGGAAGCTTTTGTAGTGTTCCTCTTGTGCACTTTTAAAC
CAACAGTTTCTTGTGTTTCATGGTGGACTTTCACCAGAAAATACACACACTGGATGATATTAGGAGATTA
GATAGATTCAAAGAGCCACCTGCATTTGGACCAATGTGTGACTTGTATGGTCCGATCCTTCTGAAGAT
TTTGAAAATGAAAATCACAGGAACATTTAGTCACAATACAGTTCGAGGATGTTCTTATTTTTATAAC
TATCCAGCAGTGTGTGAATTTTTGCAAAAACAATAATTTGTTATCGATTATTAGAGCTCATGAAGCTCAA
GATGCAGGCTATAGAATGTACAGAAAAAGTCAAACACAGGGTCCCTTCATTAACAATTTTTTCG
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TTACCGTTTGTGGAGAAAAAGTGACAGAAATGTTGGTAAATGTTCTGAGTATTTGCTCTGATGATGAA
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ATTCGAGCAATTGGCAAGATGGCAAGAGTCTTCTGTTCTCAGGGAGGAGAGTAAAGTGTGCTGACA
CTCAAGGGCCTGACTCCACAGGGATGTTGCCTAGTGGAGTGTTAGCTGGAGGACGGCAGACCCTGCAA
AGTGGTAAATGATGTTATGCAACTTGTGCTGCCTCAGATGGACTGGGGCACACCTCACTCTTTTGCTAAC
AATTCACATAATGCATGCAGGGAATTCCTTCTGTTTTTGTAGTTCCTGTCTCAGCAGC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG238045  
 Blue=ORF Red=Cloning site Green=Tag(s)

MIEVEAPITVCGDIHGQFFDLMKLFEVGGSPANTRYLFLGDYVDRGYFSIECVLYLWVLKILYPSTLFL  
 LRGNHECRHLE YFTFKQECKIKYSERYEACMEAFDSLPLAALLNQQLCVHGGLSPEIHTLDDIRRL  
 DRFKEPFAFGPMCDLLWSDPSEDFGNEKSQEHF SHNTRVRCSSYFYNYPAVCFELQNNLLSIRAHEAQ  
 DAGYRMYRKSQTTGFPSLITIF SAPNYLDVYNNKA AVLKYENNVNIRQFNCSPHPYWLPNFMDFV TWS  
 LPFVGEKVTEMLVNVLSICSDDELMTGEDQFDGSAAARKEIIRNKIRAITGKMARVFSVLREESVLT  
 LKGLTPTGMLPSGVLAGGRQTLQSGNDVMQLAVPQMDWGTPHSFANNSHNACRELLFFSSCLSS  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001289969

**ORF Size:** 1230 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:** [NM\\_001289969.1](#), [NP\\_001276898.1](#)

**RefSeq Size:** 2581 bp

RefSeq ORF: 1233 bp  
 Locus ID: 5532  
 UniProt ID: [P16298](#)

Cytogenetics: 10q22.2

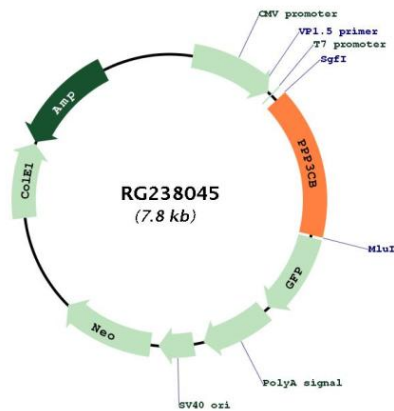
Protein Families: Druggable Genome, Phosphatase, Transcription Factors

Protein Pathways: Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Axon guidance, B cell receptor signaling pathway, Calcium signaling pathway, Long-term potentiation, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Oocyte meiosis, T cell receptor signaling pathway, VEGF signaling pathway, Wnt signaling pathway

MW: 47.1 kDa

Gene Summary: Calcium-dependent, calmodulin-stimulated protein phosphatase which plays an essential role in the transduction of intracellular Ca(2+)-mediated signals (PubMed:19154138, PubMed:26794871). Dephosphorylates and activates transcription factor NFATC1 (PubMed:19154138). Dephosphorylates and inactivates transcription factor ELK1 (PubMed:19154138). Dephosphorylates DARPP32 (PubMed:19154138).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RG238045