

## Product datasheet for **RG209027**

### PPP2R3A (NM\_002718) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PPP2R3A (NM_002718) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PPP2R3A
Synonyms:	PPP2R3; PR72; PR130
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209027 representing NM_002718 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGCAACTTACAGACTTGTGGTTAGTACTGTGAACCACTACAGCAGCGTGGTGATAGACCGCGT  
TTGAACAAGCTATACATTATTGCACTGGAACCTGCCACACCTTCACACATGGAATTGACTGCATTGTGGT  
ACACCATAGTGTGGTGCAGACCTTGCACATCCCTGTGTCTCAGTTCAAAGATGCAGACTCTGAACCT  
ATGTTTCTACCCATGAAAATGGGCTTTCTTCGGCTGAAGGAGACTATCCCAACAGGCCTTCACAGGCA  
TACCCAGGTCAGAGAGGATCTACATTCAGAATACCTACAACCTAAAGGATATTGCAGGAGAAGCAAT  
CAGTTTTGCCAGTGGGAAAATAAAGAATTTCTTTGAAAACTCAAAAACCTAACCATGCAGCTTAC  
AGAAAGGGAAGGAAAGTTAAGTCTGACTCATTTAATAGGAGGTCAGTTGATTTGGACTTGCTTTGTGGCC  
ATTATAACAACGATGGGAACGCCCATCCTTTGGTTTACTGCGGAGTTCCCTCAGTTGAGGAAAAACCTTT  
GTCTCATAGAAACTCACTGGATACGAACCTGACTTCCATGTTTCTTCAAACTTTTCTGAAGAAGACTTG  
GTTACTCAGATTTTGGAAAAACATAAATAGATAAATTTTCTTCTGGACAGACATAAAGATGTGCTTGG  
ACATCTTATTGAAATGCTCCGAGGATTTAAAAAATGCACAGACATCAAAAACATGCATAAAGAAAA  
ATCAGGGAGTAGCATCAGTGAAGGAAGTGGTAATGATACAATTTCTAGCTCTGAACTGTCTATATGAAT  
GTAATGACCAGGTAGCATCCTATCTGAAAAAGTTACCATTTGAATTCATGCAGTCTGGGAATAATGAGG  
CTCTAGATTTAACAGAACTGATCAGTAATATGCCTAGCTTACAACCTGACTCCCTTCTCCCAAGTGTGG  
CACTGAACAACCCCTAAATATGAAGATGTTGTCCAGCTCTCAGCTTCTGACTCTGGACGATTTCAAACT  
ATTGAATTGCAAAATGACAAGCCTAATTCTAGGAAGATGGACACTGTACAATCCATTCCAACAACCTCCA  
CAAATTCCTTATAAAGTATAGAGGTAATGATCCTAGAACTCTAAAAGCTGTCCAGGTCCAATCACAGTC  
ATTAACCATGAATCCTTTAGAAAATGTTTCTTCTGACGACTTAATGAAAACCTTTTATATTGAAGAAGAG  
TCAGATGGAAAGAAAGCATTAGATAAAGGACAAAAGACAGAGAATGGACCTAGTCATGAGTTATTAAGG  
TAAATGAACATAGAGCAGAATTTCCAGAACATGCTACTCATTTAAAAAATGCCCAACCAATGCAAAA  
TGAATTGGTAAGATATTTGAGAAATCATTGTTAATCTACCTAAGGAAGACTGTAATCAAAGTTTCT



[View online >](#)

AAATTTGAAGAGGGAGACCAGAGAGATTTTACAAATTCAGTAGCCAGGAAGAGATAGATAAATTGTTAA  
TGGATTTGGAATCTTTTTACAGAAGATGGAGACCTCTCTAAGAGAGCCACTTGCGAAGGGTAAAAACTC  
TAATTTTTTAAATAGTCACAGTCAGTTGACCGGTCAGACCCTTGTAGATCTTGAGCCTAAATCTAAAGTC  
TCTTCACCCATAGAAAAAGTCTCACCTTCTGTCTAACAAGGATTATTGAAACCAATGGACACAAAAATAG  
AGGAAGAGGATCGAGCCCTTACTGCGAATCCTGGAAAGCATTGAAGACTTTGCTCAAGAACTAGTTGA  
ATGCAAAATCAAGCAGAGGGAGCCTATACAAGAAAAGGAAATGATGCAAAATCTACAGGAAACCTTGACA  
ACTTCCTCCAGGCCAATTTATCAGTCTGTAGAAGTCTGTTGGTGATAAAGCCAAAGATACTACTTCAG  
CAGTTTTGATTCAGCAGACTCCAGAGGTGATCAAGATTCAAAATAAACCAGAAAAGAAACCTGGAACACC  
ACTCCACCTCCAGCCACCTCTCCAAGTGTCCCGACCTCTCTCCCGGTTCCCCATGTGAATAATGTT  
GTGAATGCGCCATTGTCCATAAACATTCACGTTTCTACTTTCCTGAAGGACTCCAGATACCTGTAGTA  
ATCATGAACAACTCTAAGCAGAATTGAACTGCTTTCATGGATATTGAAGAACAGAAAGCAGACATTTA  
TGAAATGGGAAAATTGCAAAGGTCTGTGGCTGCTCTCTATTGGAAAGCCCCATGTTGAGGGCTGCA  
GGGGGAGAGAAGACAGGATTTGTGACAGCACAGTCATTTCATTGCCATGTGGAGAAAGTTGCTGAATAACC  
ATCATGATGATGCCTCTAAATTCATCTGTCTTCTAGCAAAGCCCAACTGCAGCTCTCTAGAACAGGAGGA  
TTTCATCCCTCTACTTCAGGATGTGGTGGATACCCACCCTGGTCTCACGTTCTGAAAGATGCTCCAGAA  
TTCCACTCCCGCTACATCACCACGGTATTTCAGAGAATATTCTACACAGTCAACAGATCTTGAGGTGGAA  
AAATTAATTCGACAGAGATAAGAAAAAGCAACTTTTTGCAAACCCTAGCACTTTTGGAAAGAGGGAAGA  
TATAAACCAAAATTACAGATTACTTCTCCTATGAACATTTCTATGTTATTTATTGTAATTTCTGGAACTA  
GATACTGATCACGACCTCTACATCAGCCAGGCCGATCTGTCTCGATAACAATGACCAGGCTTCATCAAGCA  
GGATTATTGAAAGGATATTCTCTGGTGCAGTACAAGGGGAAAAACAATACAGAAAGAGGGAAGAATGAG  
CTATGCAGATTTTGTGGTTTTGATCTCTGAAGAAGACAAAAGGAATCCTACCAGCATTGAGTATTGG  
TTCCGCTGCATGGATGTGGATGGAGACGGTGTACTCTCCATGTATGAGCTGGAGTACTTCTATGAGGAGC  
AGTGTGAACGGATGGAAGCCATGGGAATTGAGCCCTTGCCATTCCATGATTTACTGTGCCAGATGCTTGA  
CCTAGTGAAGCCAGCTGTTGATGGCAAAAATACTCTAAGAGATCTGAAGAGGTGCAGAATGGCTCACATC  
TTCTATGACACTTTCTTTAATCTGGAGAAATACTTAGACCATGAACAGAGAGATCCCTTTGCGGTCCAGA  
AGGATGTTGAGAACGATGGGCCTGAGCCCTCAGACTGGGACCGGTTTGCCGCTGAGGAGTATGAGACGCT  
TGTTGCAGAGGAATCTGCCCAAGCACAATTCAGGAAGGCTTTGAAGATTATGAAACAGATGAACCTGCC  
TCTCCCTCTGAATTTGAAACAAAAGCAATAAAATATTAAGTGAAGCCTTCAGAGAAATGTGGAAGC  
TTCAATCAGTGGATGAAGAA

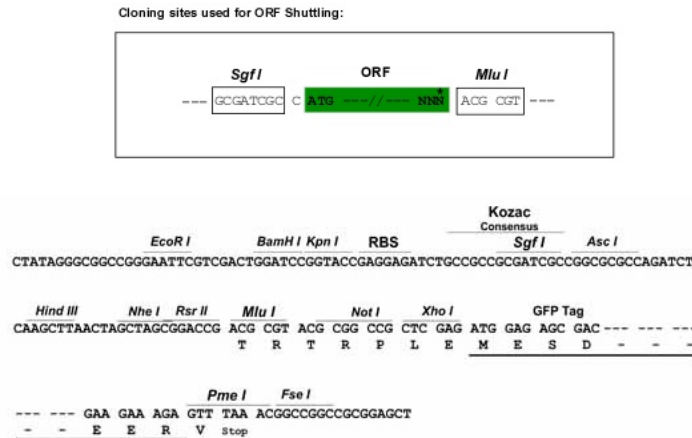
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

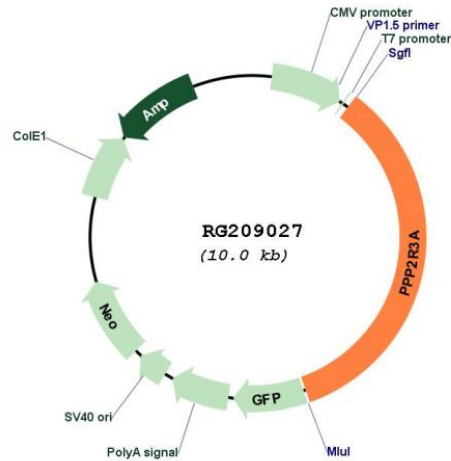
Protein Sequence: >RG209027 representing NM\_002718  
 Red=Cloning site Green=Tags(s)

MAATYRLVVSTVNHYSVVIDRRFEQAIHYCTGTCHTFTTHGIDCIVVHHSVCADLLHIPVSQFKDADLNS  
 MFLPHENGLSSAEGDYPQQAFTGIPRVKRGSTFQNTYNLKDIAGEAISFASGKIKEFSFEKLKNSNHAAY  
 RKGRKVKSDSFNRRSVDLDLLCGHYNNNDGNAPSFGLLRSSVVEEKPLSHRNSLDTNLTSMFLQNFSEEDL  
 VTQILEKHKIDNFSGGTDIKMCLDILLKCESEDLKKTCDI IKQC IKKKS GSSI SEGSGNDT ISSSETVYMN  
 VMTRLASYLKLPFEFMQSGNNEALDLTELI SNMPSLQL TPFSPVFGTEQPPKYEDVVQLSASDSGRFQT  
 IELQNDKPNRKMMDTVQSI PNNSNLSL YNLEVNDPRTLKAVQVQSQSL TMNPLENVSSDDL METLYIEEE  
 SDGKKALDKGQKTENGP SHELLKVNEHRAEFPEHATHLKKCTPMQNEIGKIFEKSFVNLPKEDCKSKVS  
 KFEEGDQRDFTNSSSQEEIDKLLMDLEFSQKMETSLREPLAKGKNSNFLNSHSQLTGQTLVDLEPKSKV  
 SSPIEKVSPSCLTRIIETNGHKIEEEDRALLLRILESIEDFAQELVECKSSRGSLSQEKEMMQILQETLT  
 TSSQANLSVCRSPVGDKAKDTS AVLIQQTPEVIKI QNKPEKPGTLP PPPATSPSPRPLSPVPHVNNV  
 VNAPLSINIPRFYFPEGLPDTCSNHEQTL SRIETAFMDIEEQADIYEMGKI AKVCGCPL YWKAPMFRAA  
 GGEKTGFVTAQSF IAMWRKLLNNHHDDASKFICLLAKPNCSSLEQEDFI PLLQDVVDTHPGLTFLKDAPE  
 FHSRYITTVIQRIFYTVNRSWSGKITSTEIRKSNFLQTLALLEEEEDINQITDYFSYEHFYVIYCKFWEL  
 DTDHDL YISQADLSRYNDQASSRIIERIFSGAVTRGKTIQKEGRMSYADFVWFLI SEEDKRNPTSIEYW  
 FRCMDVDGDGVL SMYELEYFYEEQCERMEAMGIEPLPFHDLLCQMLDLVKPAVDGKITLRDLKRCRMAHI  
 FYDTFFNLEKYL DHEQRDPFAVQKDVENDGPEPSDWDRF AAEYEYETLVAEESAQAQFQEGFEDYETDEPA  
 SPSEFGNKS NKILSASLPEKCGKLQSVDEE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI  
 Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_002718

**ORF Size:** 3450 bp

**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_002718.5](#)

RefSeq Size: 6762 bp

RefSeq ORF: 3453 bp

Locus ID: 5523

UniProt ID: [Q06190](#)

Cytogenetics: 3q22.2-q22.3

Domains: EFh

Protein Families: Druggable Genome, Phosphatase

**Gene Summary:** This gene encodes one of the regulatory subunits of the protein phosphatase 2. Protein phosphatase 2 (formerly named type 2A) is one of the four major Ser/Thr phosphatases and is implicated in the negative control of cell growth and division. Protein phosphatase 2 holoenzymes are heterotrimeric proteins composed of a structural subunit A, a catalytic subunit C, and a regulatory subunit B. The regulatory subunit is encoded by a diverse set of genes that have been grouped into the B/PR55, B'/PR61, and B''/PR72 families. These different regulatory subunits confer distinct enzymatic specificities and intracellular localizations to the holoenzyme. The product of this gene belongs to the B'' family. The B'' family has been further divided into subfamilies. The product of this gene belongs to the alpha subfamily of regulatory subunit B''. Alternative splicing results in multiple transcript variants encoding different isoforms.[provided by RefSeq, Jun 2010]