

## Product datasheet for **MG211070**

### **PPP1R10 (BC052059) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PPP1R10 (BC052059) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PPP1R10
Synonyms:	CAT53, FB19, PNUTS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>MG211070 representing BC052059  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGGTTCAGTCCCATAGACCCAAAGAAGTCTCAAGGGCCTGGATAGCTTCCTTACCCGGGACGGAG  
 AAGTGAAGAGTGTGGATGGAATTTCCAAGATCTTCAGTCTAATGAAGGAGGCACGAAAGATGGTGGATCG  
 GTGCACGTAAGTGAACATAATCCTGCAGACCCGCGCTCCAGAAGTCTCGTCAAGTTTATTGATGTCGGT  
 GGCTACAAGTCTGAACAACCTGGCTAACATATCAAAGACCACCAACAACATTCCTCTCTACAGCAGA  
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 GAAGCAGCTCAGCAAGTCAAGTGAAGTGAAGAGCTCCGAAATGGCATCAGTCTTGTGAGTACTGG  
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 GAAAAAGTGAACACGCTTCTGAGCGCCTTTGACTGAAGTGAAGGCTGAGACCCGGGCTGAGGAAGC  
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 ACTGGACTGGAGCTGGACACCCATCTTTGGTGCCTGTGAAGAAGAACTCCAGCACTGTGGTTGTGTCAG  
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 ACCTGCAGAGAAGAAATACAAGCCTCTCAACACAGCCCCAATACCACAAAGAAATCAAAGTGAAGATC  
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 CTCTGGATGCAAAGCCTGTGGACAGCCCTGGAGTCCCAACCAGCTGACTCGCAAGGGCAGAAAGAGGAA  
 AACTGTGACTTGGCCTGAGGAGGGCAAGCTGAGAGAGTATTTCTACTTTGAACTGGACGAAACTGAGCGA  
 GTGAATGTGAACAAGATCAAAGACTTCGGGGAGGCTGCTAAGCGTGAAGTACTGTCTGACCGACATGCTT  
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 CCATTCACCAAACTCATCCCTTGGATGAGGAATGTGCCATGGATGAGACTCCATATGTCGAGACCT  
 GGAGCCTGGAGGGTCTGGTGGCTCACCTGATGGAGCAGGAGGCTCCAAGTGCCTCCAGTCTGGCCAAT  
 CTTATGGGAAGCATGGGAGCTGAAAGAGCCCCAGGGCCTGGAGGAGCGGCATCAATGTTTCAGGAGA  
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 AGACAAGCTCAAGCAGATGCTGGTGCCTCATGGGCTCCTAGGTCCTGGTCTGTGGCCAATGGCTTTCCA  
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 TCGAGGCCACGACCATCGAGGGCCACCCTCATGAACACCGTGGTCTGATGGCCATGGGGGAGGCGGC  
 CACCGAGGCGATGATGGAGGCCACAGTCAAGGAGGACATGTCAAACCGCCCTGTCTGCCGACACTTCA  
 TGATGAAGGGCAACTGCCGCTATGAGAACAAGTGCCTTCTACCACCGAGGGTCAATGGGCCCCCACT  
 GCCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG211070 representing BC052059  
 Red=Cloning site Green=Tags(s)

MGSGPIDPKELLKGLDSFLTRDGEVKSVDGISKIFSLMKEARKMVSRCYLNIIILQTRAPEVLVKFIDVG  
 GYKLLNNWLTYSKTTNNIPLLQILLTLQHLPLVDHLKQNNATKLVKQLSKSSEDEELRKLASVLVSDW  
 MAVIRSQSSTQPAEKDKKKRKEEGKSRTTLPERPLTEVKAETRAEEAPEKKKEPKSLRRTTAPSHAKFRS  
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 IPPQPMGLGFLDALNSAPVPGIKIKKKKVLSPATAAKPSPFEGKSTEQSTAKPSSPEPAPPAEPMDD  
 RPGTVPVPEVPELMDAASSEPGALDAKPVDSPGDPNQLTRKGRKRKTVTWPEEGKLRIFYFELDETER  
 VNVNLIKDFGEAAKREILSDRHAFETARRLSHDNMEEKVPWVCPRLVLPSPVLPVPGSNSQERYIQAERE  
 KGILQELFLNKESPEHPDPEPYEPIPKLIPLDEECAMDETPYVETLEPGGSGGSPDGAGGSKLPPVLAN  
 LMGSMGAGKSPQGGGGINVQEILTSIMGSPNSHPSEELLKQPDYSDKLKQMLVPHGLLGPGPVANGFP  
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 GPYHRGRGGGNEPPPPPPFRGARGGRSGGPPNGRGGPGGGMVGGGHRPHEGPGGSMGSGHRSHDG  
 PGGNMGSGHRSHDGPGGNMGGSGGHRSGHEGPHGGPHGRPHDVPSHRGRDHRGPPPHHRGHDGHHGGG  
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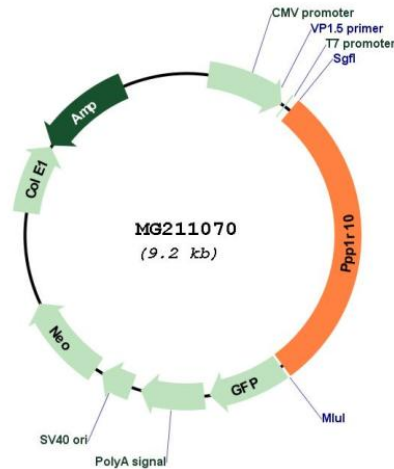
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: BC052059

ORF Size: 2666 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: [BC052059](#), [AAH52059](#)

RefSeq Size: 4240 bp

RefSeq ORF: 2666 bp

Locus ID: 52040

Cytogenetics: 17 18.77 cM

**Gene Summary:**

Scaffold protein which mediates the formation of the PTW/PP1 phosphatase complex by providing a binding platform to each component of the complex. The PTW/PP1 phosphatase complex plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase. Mediates interaction of WDR82 and PPP1CA. Inhibitor of PPP1CA and PPP1CC phosphatase activities. Has inhibitory activity on PPP1CA only when phosphorylated. Binds to mRNA, single-stranded DNA (ssDNA), poly(A) and poly(G) homopolymers.[UniProtKB/Swiss-Prot Function]