

## Product datasheet for **RR213295**

### PPP1r12a (NM\_053890) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PPP1r12a (NM_053890) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPP1r12a
Synonyms:	M110; MBSP; Mypt1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR213295 representing NM\_053890  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGAAGATGGCGGACGCGAAGCAGAAGCGGAACGAGCAGCTGAAGCGCTGGATCGGCTCCGAGACGGACC  
 TCGAGCCTCCCGTGGTGAAGCGCCAGAAGACCAAGGTGAAGTTCGACGATGGCGCGCTTCTCTCGCCGC  
 CTGCTCCAGCGGCGACACGGACGAGGTCTCAAGCTGCTGCACCGCGGCCGACATCAATTACGCCAAT  
 GTGGACGGACTCACCGCCTGCACCAGGCTTGCAATGATGACAATGTTGATATGGTGAAGTTTCTGGTAG  
 AAAATGGAGCAAATATCAATCAACCTGACAATGAAGGCTGGATCCACTCCATGCAGCCGCTTCTGTGG  
 ATATCTGGATATTGCAGAATTTTATTGGTCAAGGAGCACATGTAGGAGCTGTCAACAGTGAAGGTGAC  
 ACACCTTTAGATATTGCAGAGGAGGAAGCAATGGAAGAGCTACTTCAAAATGAGGTTAATCGCAAGGTG  
 TTGATATAGAAGCAGCTCGAAAAGAAGAGGAACGCATAATGCTTAGAGACGCGAGGCAGTGGTTGAACAG  
 TGGTCACATCAGTGACGTCGGCATGCAAAGTCCGGAGGCACAGCACTCCACGTGCAGCGGCCAAAGGG  
 TATACAGAAGTTTTAAAACCTTTAATACAGGCAGGCTATGATGTTAATATTAAGATTATGATGGCTGGA  
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 TATGGAGACGGTCAACAAAGTGGGCCAAACAGCCTTTGATGTAGCAGATGAAGACATTTTGGGATATCTA  
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 GATACGTTACGCTTCGAGTCCCAGACTCTCGTCTCTTTGGATAATAAGAAAAGGAGAAAGACAATAAA  
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 GTGCTGCAGCTTCTTCTACCACAGCCCTGACCACAACACTGCTGGCACTCTTCTCCATCAGAGGT  
 CAGGGAGAGACGAGGTATACCTCACTCCTGTTAGGGATGAAGAGTCTGAATCCCAAAGGAAAGCAAGA  
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 AACCATATGGTAGCCGACTAGAAAAGGATGACTCAACTGACTTCAAAAAGCTTTATGAACAAATCTTAGC  
 TGAAAAATGAAAAACTAAAGGCACAGCTACATGACACAAATATGGAATCAACGGATCTAAAGTTGCAGTTG  
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR213295 representing NM\_053890  
 Red=Cloning site Green=Tags(s)

MKMADAKQKRNEQLKRWIGSETDLEPPVVKRQKTKVKFDDGAVFLAACSSGDTDEVLKLLHRGADINYAN  
 VDGLTALHQACIDNDVMVKFLVENGANINQPDNEGWIPLHAAASCGYLDIAEFLIGQGAVHGVNSEGD  
 TPLDIAEEEEAMEELLQNEVNRQGV DIEAARKEEERIMLRDARQWLN SGIHSDVRHAKSGGTALHVA AAKG  
 YTEVLKLLIQAGYDVNIKDYDGTPLHAAAHWGK EEAACRILVDNLC D METVNKVGQTAFDVADEDILGYL  
 EELQKKQNLHSEKRDKK SPLIESTANMENNQPQKTFKNKETLII EPEKNASRIE SLEQEKADEEEEEGKK  
 DESSCSSEEEDEEDSESEAE TDKTKPMASVTNAHTASTQAAPAAVTTPTLSSNQGTPTSPVKKFPPTSTTK  
 ISPKEEERKDESPASWR LGLRKTGSY GALAEITASKEAQKEKDTAGVIRSASSPRLSSSLDNKEKEKDNK  
 GTRLAYVAPTIPRRLGSTSDIEEKENRESSNLRTSSSYTRRKWEDDLKKNSSINEGSTYHRSTSNRLWAE  
 DSTEKEKDSAPTAATILVAPT VVSAAASSTTALTTTTAGT LSSSTSEVRERRRSY LTPVRDEESESQRKAR  
 SRQARQSRRTSQGVTLTDLQEA EKTIGRSRSTRTREQENE EKDKEEKEKQDK EKEEKESEVSREDEYK  
 QKYSRTYDETYARYRPVSTSSSSTPSSSSLSTLGSSLYASSQLNRPN SLVGITSAYS RGLTKDNERE GKK  
 KEEKEGEGDKSQPKSIRERRRPREKRRSTGVSWFTQDSDENEQERQSDTEDGSSKRDTQTD S VSRYS SSS  
 TSSSDRYD SLLGRSASYSYLEERKPYGSRLEKDDSTDFK KLYEQILAE NEK LKAQLHDTNMELTDLKLQL  
 EKATQRQERFADRSLLEMEKRERRALERRISEMEEELKMLPDLKADNQR LKDENGALIRVISKLSK

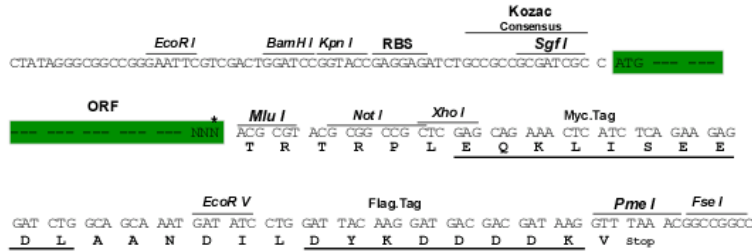
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfi-MluI

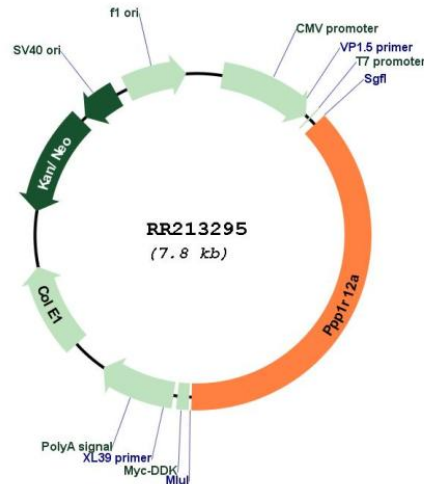
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_053890

ORF Size: 2928 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\\_053890.1](#), [NP\\_446342.1](#)

RefSeq Size: 3300 bp

RefSeq ORF: 2931 bp

Locus ID: 116670

UniProt ID: [Q10728](#)

**Cytogenetics:** 7q21  
**MW:** 109.7 kDa  
**Gene Summary:** selectively binds to PP-1C and increases the substrate specificity of the phosphatase towards myosin [RGD, Feb 2006]