

## Product datasheet for MR206608

### PPP4r2 (BC110429) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ppp4r2 (BC110429) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Ppp4r2  
**Synonyms:** BE691708; C230060M08Rik  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR206608 representing BC110429  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGACGTCGAGAGGCTTCAGGAGGCGCTGAAAGATTTTGAGAAGAGAGGGAAAAAGGAAGTTTGCCTG  
 TACTGGATCAGTTTCTGTGATGTAGCTAAAAGTGGAGAAACAATGATTCAGTGGTCCCAATTTAAAGG  
 CTATTTTCATTTCAAAGTGGAGAAAGTATGATGGATGATTTTCAGAACTTCAGCTCCTGAACCAAGAGGTCCT  
 CCCAATCTAATGTTGAATATATCCCTTTGATGAAATGAAGGAAAGAATACTGAAAATTGTCAGTGGAT  
 TTAATGGTATCCCTTTACTATTCAGCGGCTATGTGAATTGCTAACGGATCCGAGAAGAACTATACAGG  
 AACAGACAAGTTTCTCAGAGGAGTAGAGAAGAATGTGATGGTTGTAGCTGCGTTTGTCCATCCTCAGAG  
 AAGAACAATTCTAATAGCTTAAATAGAATGAATGGTGTATGTTTCTGGAAACTCACCAAACTATACTG  
 ACAGGTCTAATATAAACGGGCTTGAACACCTAGGCCACTTAATCGACCAAGGCTTTCTTTGTCAGCCCC  
 CTTGACAACAAATGGTTTGCCTGAGAGCACAGATAGCAAAGATTCGAGCTGCAGCTAAGTGAAGAGAAA  
 GGCCACAGTGATTTCTCAGCCTCTGAATCAGAAGTTTCTTACTGAGCCCTGTTAAAAATAAACATCCAG  
 ATGAAGATGCTGTGGAGTCTGAGGAACATGAGGTGAAAAGACTGAAGTTTGACAAAGAAGGTGACGTCAG  
 AGAGACAGCTAGCCAAACGGTGTCTGGTGAAGTCTCTTCAGTTAGAGCAGAGGAAACGGAACAGCAGCT  
 CCCCCTCTGACAAGGACAGAGAAAGTGAACCCAGGCAGCACTGTACAGAAGAGGAGGAGGAGGAGGAGG  
 AAGAAGAGGAAGAGGAGGAGGAAGAATCGTTTATGACACCAAGAGAAATGGTCCCAGAAAAGAAAAATCA  
 AGAAAAGGAATCTGATGACGCCTTAACTGTGAATGAAGAGACTTCAGAGGAGAGCCATCAGATGGAAGGC  
 TCTGGTGTGCTCCAGCTCAGACAGACTCCACTTCAGAAAGGAGTGCAGTGCAGGGCCCTCAAGGAGTG  
 GCTCTGACTGCCTGGAGACACAGGAGTCAAGAGGGCCCCCTTCCAGTAAGACTGGAGAGAGTGTGTGAGT  
 GCCGTCGTCATGGAGAGTGAGGAAGCCACAGAAGTCACAGATGACCCAATGGAGCAAGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR206608 representing BC110429  
Red=Cloning site Green=Tags(s)

MDVERLQEALKDFEKRKKEVCPVLDQFLCHVAKTGETMIQWSQFKGYFIFKLEKVMDDFRTSAPEPRGP  
 PNPVVEYIPFDEMKERILKIVTGFNGIPFTIQRLCELLTDP RRNYTGTKFLRGVEKNVMVSCVCPSS  
 KNNSNSLNRMGVMFPGNSPNYTD RSNINGP GTPRPLNRPKLSLAPLTTNGLPESTDSKDSELQLSEEK  
 GHSDSSASESEVSLLSPVKNKHPDEDAVESEEHEVKRLKFDKEGDVRETASQTVSGEVSSVRAEETETA  
 PPPDKDRESRTRQHCTEEEEEEEEEEEEEEEEESFMTPREMVPERKNQEKE SDDALTVNEETSEESHQMEG  
 SGVSPAQTDSTSERSDSAGASRSGSDCLETQESGGPPSSKTGESVSVSSMESEEATEVTD DDPMEQD

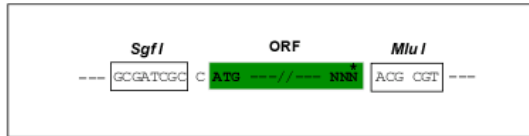
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** BC110429

**ORF Size:** 1251 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:** [BC110429.1](#)

**RefSeq Size:** 2959 bp

**RefSeq ORF:** 1253 bp

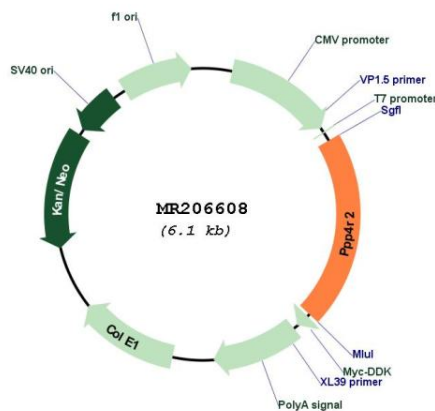
**Locus ID:** 232314

**Cytogenetics:** 6 D3

**MW:** 108.5 kDa

**Gene Summary:** Regulatory subunit of serine/threonine-protein phosphatase 4 (PP4). May regulate the activity of PPP4C at centrosomal microtubule organizing centers. Its interaction with the SMN complex leads to enhance the temporal localization of snRNPs, suggesting a role of PPP4C in maturation of spliceosomal snRNPs. The PPP4C-PPP4R2-PPP4R3A PP4 complex specifically dephosphorylates H2AFX phosphorylated on 'Ser-140' (gamma-H2AFX) generated during DNA replication and required for DNA double strand break repair (By similarity). Mediates RPA2 dephosphorylation by recruiting PPP4C to RPA2 in a DNA damage-dependent manner. RPA2 dephosphorylation is required for the efficient RPA2-mediated recruitment of RAD51 to chromatin following double strand breaks, an essential step for DNA repair (By similarity). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR206608