

Product datasheet for MR223487

PPP4r2 (NM_182939) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPP4r2 (NM_182939) 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:	>MR223487 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACGTCGAGAGGCTGCAGGAGGCGCTGAAAGATTTTGAGAAGAGAGGGAAAAAGGAAGTTTGCCTG
TACTGGATCAGTTTCTGTGATGTAGCTAAAAGTGGAGAAACAATGATTCAGTGGTCCCAATTTAAAGG
CTATTTCAATTTCAAAGTGGAGAAAGTATGGATGATTTTCAGAACTTCAGCTCCTGAACCAAGAGGTCT
CCCAATCTAATGTTGAATGTATCCCTTTGATGAAATGAAGGAAAGAATACTGAAAATTGTCAGTGGAT
TTAATGGTATCCCTTTACTATTCAGCGGCTATGTGAATTGCTAACGGATCCGAGAAGAACTATACAGG
AACAGACAAGTTTCTCAGAGGAGTAGAGAAGAATGTGATGGTTGTAGCTGCGTTTGTCCATCCTCAGAG
AAGAACAATTCTAATAGCTTAAATAGAATGAATGGTGTATGTTTCTGGAAACTCACCAAACTATACTG
ACAGGTCTAATATAAACGGGCTGGAACACCTAGGCCACTTAATCGACCAAGCTTTCTTTGTCAGCCCC
CTTGACAACAAATGGTTTGCCTGAGAGCACAGATAGCAAAGATTCGAGCTGCAGCTAAGTGAAGAGAAA
GGCCACAGTGATCTTCAGCCTCTGAATCAGAAGTTTCTTACTGAGCCCTGTTAAAAATAAACATCCAG
ATGAAGATGCTGTGGAGTCTGAGGAACATGAGGTGAAAAGACTGAAGTTTGACAAAGAAGGTGACGTCAG
AGAGACAGCTAGCCAAACGGTGTCTGGTGAAGTCTCTTCAGTTAGAGCAGAGGAAACGGAACAGCAGCT
CCCCCTCTGACAAGGACAGAGAAAGTGAACCCAGGCAGCACTGTACAGAAGAGGAGGAGGAGGAGGAAG
AAGAGGAAGAGGAGGAGGAAGAATCGTTTATGACACCAAGAGAAAATGGTCCAGAAAAGAAAAATCAAGA
AAAGGAATCTGATGACGCCTTAACTGTGAATGAAGAGACTTCAGAGGAGAGCCATCAGATGGAAGGCTCT
GGTGTGCTCCAGCTCAGACAGACTCCACTTCAGAAAGGAGTGACAGTGCAGGGGCTCAAGGAGTGGCT
CTGACTGCCTGGAGACACAGGAGTCAGGAGGGCCCCCTCCAGTAAGACTGGAGAGAGTGTGTCAGTGCC
GTCGTCCATGGAGAGTGAGGAAGCCACAGAAGTCACAGATGACCAATGGAGCAAGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR223487 protein sequence
Red=Cloning site Green=Tags(s)

MDVERLQEALKDFEKRKKEVCPVLDQFLCHVAKTGETMIQWSQFKGYFIFKLEKVMDDFRTSAPEPRGP
 PNPNVCEIPFDEMKERILKIVTGFNGIPFTIQRLCELLTDP RRNYTGTKDFLRGVEKNMVMVSCVCPSS
 KNNSNSLNRMGVMFPGNSPNYTD RSNINGP GTPRPLNRPKLSLAPLTTNGLPESTDSKDSELQLSEEK
 GHS DSSASEV SLLSPVKNKHPDEDAVESEEHEVKRLKFDKEGDVRETASQTVSGEVSSVRAEETETAA
 PPPDKDRESRTRQHCTEEEEEEEEEEEEEE SFMTPREMPERKNQEKESDDALTVNEETSEESHQMEGS
 GVSPAQTDSTERSDSAGASRSGSDCLETQESGGPPSSKTGESVSVSSMESEEATEVTDDPMEQD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_182939

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: [NM_182939.1](#), [NM_182939.2](#), [NM_182939.3](#), [NM_182939.4](#), [NP_891984.1](#)

RefSeq Size: 3641 bp

RefSeq ORF: 1254 bp

Locus ID: 232314

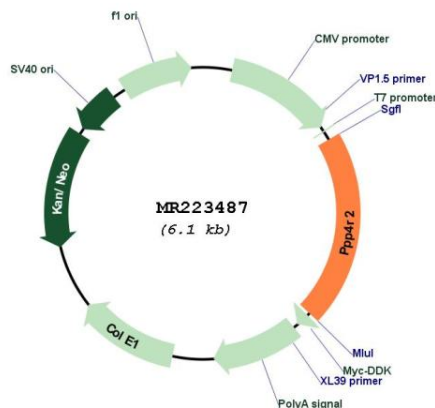
UniProt ID: [Q0VGB7](#)

Cytogenetics: 6 D3

MW: 46.3 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 MR223487