

Product datasheet for **MR210815**

Ppp4r3a (NM_211355) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ppp4r3a (NM_211355) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ppp4r3a
Synonyms:	1110034C04Rik; BC064465; mKIAA2010; Smek1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR210815 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGACCGACACCCGACGCGGGTGAAGGTCTACACGCTCAACGAGGACCGGCAGTGGGACGACCGGGGTA
 CTGGCCATGTGTCTCCGGCTACGTGGAGAGGCTGAAGGGCATGTCCCTGCTCGTCAGGGCGGAGAGCGA
 CGGTTCTCTTCTAGAGTCCAAAATAAATCCTAACACTGCATACCAGAAAACAAGGATACTCTGATT
 GTGTGGTCTGAAGCAGAAAATTATGACTTGGCCCTTAGCTTTCAAGAAAAAGCTGGATGCGATGAAATTT
 GGGAGAAAATATGTCAGGTTCAAGGAAAGGACCTTCAGTGGACATCACTCAGGACCTGGTAGATGAATC
 TGAAGAGGAGCGATTTGATGATATGCTCACCAGGTTTAGAATTGCCGTCATGTGAGTTAAGTCGACTT
 GAGGAAATGCAGAGCTTGTGGCATCATCTTACCTTCCCCCTCCGACGTGAGAACTCGCACTAGCAC
 TGGAAAATGAGGGTTATATTAAGAGCTTTTAGAGCTTTTCATGTGTGTGAGGATTTGGAAAACATTGA
 AGGACTGCACCACTTATATGAAATTATTAAGGGATCTTCTCTTGAATCGAACTGCTCTTTTGAAGTT
 ATGTTCTCTGAGGAATGTATAATGGACGTCATTGGATGCTTGAATATGACCCAACCTTTATCACAACCAC
 GTAAACACAGGAATTTTAACAAAAACAGCCAAGTTAAAGAAGTAATCCCATATCAGATCCTGAGCT
 GAAACAAAAAATTCATCAGACATACAGAGTTTCACTATATACAAGATATGTTTCTCCCTACCCCTTCAGTC
 TTCGAAGAAAACATGTTATCAACACTTCACTCCTTATCTTTTCAACAAGGTAGAAATCGTTGGTATGT
 TACAGGAAGATGAAAAATTTCTGACAGATTTGTTTGCACAACAGATGAAGCAACAGATGAGGAAAA
 AAGACAAGAAATGGTTAACTTTTTAAAGAATTTTGTGCATTTTCTCAACGCTACAACCCCAAAACAGA
 GATGCTTTTTTCAAGACTTTGTCAAATATGGGCATATTACCAGCTTTAGAAGTCATCCTTGGCATGGATG
 ATACACAGGTGCGAAGTGCTGCTACGGATATTTCTCATACTTGGTTGAATATAATCCATCCATGGTACG
 AGAGTTTGTGTCAGGAGGCACAACAGAATGATGATGATATTTTGTCTCATCAACCTCATTATAGAACAT
 ATGATTTGTGATACAGATCCCGAGCTTGGAGGGCAGTCCAACCTTATGGGCTGCTTCAAGCTTTAGTTG
 ACCCAGAGAACATGCTAGCCACTGCCAATAAAACAGAAAAGACTGAATTTCTGGGTTTCTCTACAAGCA
 CTGTATGCATGTTCTCACTGCTCCCTTACTAGCAAATACAACAGAAAGACAAGCCTAGTAAAGATGATTTT
 CAAACTGCGCAGTTACTAGCACTTGTATTGGAATTGCTAACATTTTGTGTGGAGCACCATACCTACCACA
 TAAAGAACTATATTATCAACAAGGACATTCTTCGAGAGTGCTAGTTCTTATGGCCTCAAGCATGCTTT
 CTTGGCATTATGTGCCCTCCGTTTTAAGAGAAAAATCATTGGATTAAGATGAATTTTATAACCGCTAC
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 AATTGAGAATTATTGAAAGCACTAGAAGATGTAGATTATGTACAGACGTTTAAAGGATTAATTTGAGG
 TTTGAACAGCAAAGAGAAAGGCAAGACAACCCCAAACTTGATAGCATGCGGTCTATCTTGAGGAATCATC
 GATATCGACGAGATGCCAGAACTAGAAGACGAAGAAGAGATGTGGTTCAACACAGATGAAGATGACAT
 GGAAGATGGAGAAGCTGTGGTGTCTCCATCTGACAAAACGAAGAATGACGATGATATTATGGATCCAATA
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 CTGGACGACAGAGCCCAAGTTTCAAACCTTCTTGTCCAGTGGGACAAAGACTAACCTCACCAGCCAGTC
 ATCCGCAACAAGCCTGCCTGGTTCTCAGGGTCACCTGGCTCCCCGGGCTCTCCGGGCTCTCCTGGATCC
 GTCCTAAGAGTACATCTCAGACGCGAGCTATTACCACAAAGGGAGGACTCGTGGGTCTGGTAGATTATC
 CTGATGATGATGAAGATGATGATGAGGATGAAGACAAGGAAGACACACTACCAGTGTCAAAGAAAGCAAA
 ATTTGAGTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210815 protein sequence

Red=Cloning site Green=Tags(s)

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MTDTRRRVKVYTLNEDRQWDDRGTHGVSSGYVERLKGMSLLVRAESDGSLLLESKINPNTAYQKQDQTLI
VWSEAEYDLALSFQEKAGCDEIWEKICQVQKDPVSDITQDLVDESEERFDDMSSPGLPSCSRL
EEIAELVASSLPSPRLREKLALALENGYIKKLELFHVCEDLENIEGLHHLYEIIKGIFLLNRTALFEV
MFSEECIMDVIGCLEYDPTLSQPRKHREFLTAKFKEVIPISDPELKQKIHQTYRVQYIQDMVLPTPSV
FEENMLSTLHSFIFFNKVEIVGMLQEDEKFLTDLFAQLTDEATDEEKRQELVNFLKEFCAFSQTLPQNR
DAFFKTLNMGILPALEVILGMDDTQVRSAAATDIFSYLEYNPSMVREFVMQEAQQNDDILLINLIEH
MICDTPDELGGAVQLMGLLRTLVDPENMLATANKTEKTEFLGFFYKHCMHVLTAPLLANTTEDKPSKDDF
QTAQLLALVLELLTFCVEHHTYHIKNYIINKDILRRVLVLMASKHAFLALCALRFKRKIIGLKDEFYNRY
IMKSFLFEPVVKAFLNNGSRYNLMNSAIEMFEFIRVEDIKSLTAHVNIENYKALEDDVYVQTFKGLKLR
FEQQRERQDNPKLDSMRSILRNHRYRRDARTLEDEEEMWFNTDEDDMEDGEAVVSPDKTKNDDIMDPI
SKFMERKKLKESEEKEVLLKTNLSGRQSPSFKLSLSSGKTNLTSQSSATSLPGSPGSPGSPGSPGSPG
VPKSTSQTAAITTKGGLVGLVDYPDDDEDDDEDEDKEDTLPVSKKAKFES
  
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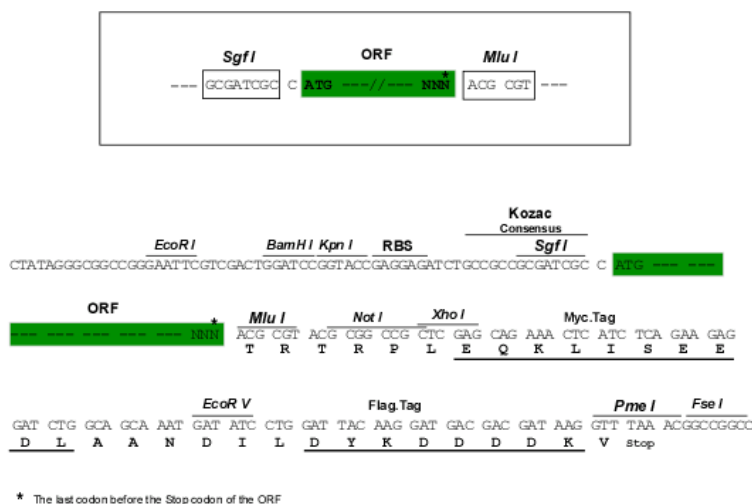
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfi-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM 211355

ORF Size: 2460 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_211355.2](#), [NP_997594.1](#)

RefSeq Size: 4555 bp

RefSeq ORF: 2463 bp

Locus ID: 68734

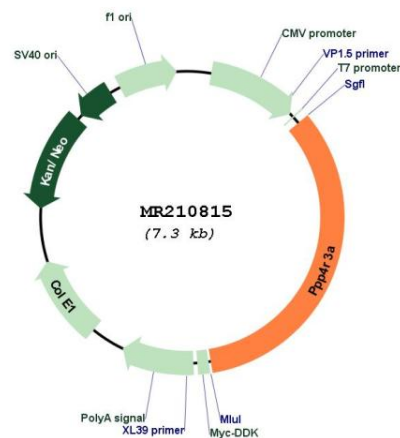
UniProt ID: [Q6P2K6](#)

Cytogenetics: 12 E

MW: 93.8 kDa

Gene Summary: Regulatory subunit of serine/threonine-protein phosphatase 4. May regulate the activity of PPP4C at centrosomal microtubule organizing centers. The PPP4C-PPP4R2-PPP4R3A PP4 complex specifically dephosphorylates H2AFX phosphorylated on 'Ser-140' (gamma-H2AFX) generated during DNA replication and required for DNA DSB repair (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210815