

Product datasheet for **MG223171**

Ppp4r3a (NM_001160214) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ppp4r3a (NM_001160214) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ppp4r3a
Synonyms:	1110034C04Rik; BC064465; mKIAA2010; Smek1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>MG223171 representing NM_001160214
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACCGACACCCGACGCGGGTGAAGGTCTACACGCTCAACGAGGACCGCAGTGGGACGACCGGGGTA
 CTGGCCATGTGTCTCCGGCTACGTGGAGAGGCTGAAGGGCATGTCCCTGCTCGTCAGGGCGGAGAGCGA
 CGGTTCTCTTCTTAGAGTCCAAAATAAATCCTAACACTGCATACCAGAAAACAAGGATACTCTGATT
 GTGTGGTCTGAAGCAGAAAATTATGACTTGGCCCTTAGCTTTCAAGAAAAAGCTGGATGCGATGAAATTT
 GGGAGAAAATATGTCAGGTTCAAGGAAAGGACCTTCAGTGGACATCACTCAGGACCTGGTAGATGAATC
 TGAAGAGGAGCGATTTGATGATATGCTCACCAGGTTTGAATGCGTCATGTGAGTTAAGTCGACTT
 GAGGAAATGCAGAGCTTGTGGCATCATCTTTACCTTCCCCCTCCGACGTGAGAACTCGCACTAGCAC
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 TCGCAGAGTGCTAGTTCTTATGGCCTCCAAGCATGCTTTCTTGGCATTATGTGCCCTCCGTTTAAAGAGA
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 TCACCTGGCTCCCGGGCTCTCCGGGCTCTCTGGATCCGTCCTAAGAGTACATCTCAGACGGCAGCTA
 TTACCACAAAGGAGGACTCGTGGGTCTGGTAGATTATCTCTGATGATGATGAAGATGATGATGAGGATGA
 AGACAAGGAAGACACACTACCAGTGTCAAAGAAAGCAAAATTTGAGTCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

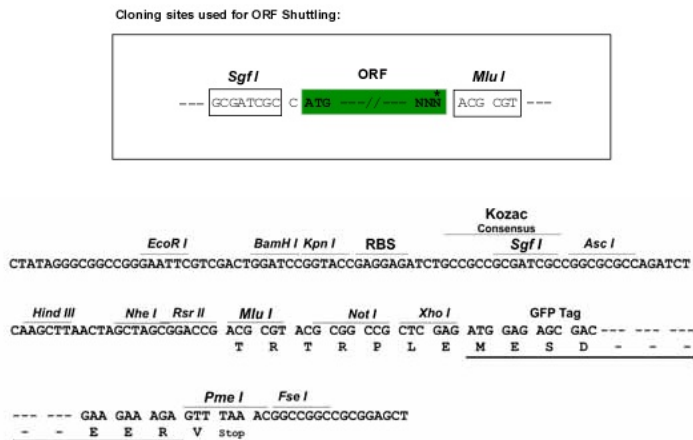
Protein Sequence:
 >MG223171 representing NM_001160214
 Red=Cloning site Green=Tags(s)

MTDTRRRVKVYTLNEDRQWDDRGTGHVSSGYVERLKGMSLLVRAESDGSLLLESKINPNTAYQKQDITI
 VWSEAEYDLALSFQEKAGCDEIWEKICQVQGDPSVDITQDLVDESEERFDDMSSPGLELPSCELSRL
 EEIAELVASSLPSPLRREKLALALENGYIKLLELFHVCEDLENIEGLHHLYEIIKGIFLLNRTALFEV
 MFSEECIMDVIGCLEYDPTLSQPRKHREFLTAKFKEVIPISDPELKQKIHQTYRVQYIQDMVLPTPSV
 FEENMLSTLHSFIFFNKVEIVGMLQEDEKFLTDLFAQLTDEATDEEKRQELVNFLKEFCAFSQTLQPQNR
 DAFFKTLNMGILPALEVILGMDDTQVRSAAATDIFSylvEYNPSMVREFVMQEAQQNDVSKKLTQKIT
 SKDILLINLIIEHMICDTPDELGGAVQLMGLLRTLVDPENMLATANKTEKTEFLGFFYKHCMHVLTAPLL
 ANTTEKPSKDDFQTAQLLALVLELLTFCVEHHTYHIKNYIINKDILRRVLVLMASKHAFLALCALRFKR
 KIIGLKDEFYNRYIMKSFLFEPVKAFLNNGSRYNLMNSAIIEMFEFIRVEDIKSLTAHVIENYWKALED
 VDYYVQTFKGLKRFEQQRERQDNPKLDSMRILRNHRYRRDARTLEDEEEMWFNTDEDDMEDGEAVVSPS
 DTKNDDIMDPISKFMERKKLKESEEKVLKTNLSGRQSPSKLSLSSGKTNLTSQSSATSLPGSPG
 SPGSPGSPGSPGSPKSTSQTAAITTKGGLVGLVDYPDDDEDDDEDEKEDTLPVSKKAKFES

TRTRPLE – GFP Tag – V

Restriction Sites:
 SgfI-MluI

Cloning Scheme:



ACCN:	NM_001160214
ORF Size:	2499 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_001160214.1](#), [NP_001153686.1](#)

RefSeq Size: 4594 bp

RefSeq ORF: 2502 bp

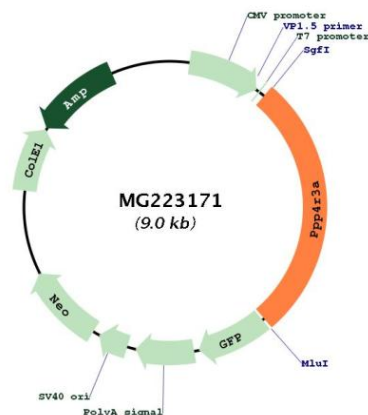
Locus ID: 68734

UniProt ID: [Q6P2K6](#)

Cytogenetics: 12 E

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 MG223171