

Product datasheet for **RC209255**

PP4R1 (PPP4R1) (NM_005134) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PP4R1 (PPP4R1) (NM_005134) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PP4R1
Synonyms:	MEG1; PP4(Rmeg); PP4R1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC209255 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGACCTCTCGCTGCTTCAGGAGGACCTGCAGGAGGACGCAGACGGATCCCTGGACTTTGTCTCAC
 AAGATGAAATGTTGACGCCCTGGGAGATTGGACAAGTATGCTGCAAGTGAGAACATATTTAACAGACA
 AATGGTGGCCCGGAGTTTCTCGATACCTTGAGGAAAGTCTGCGATGATGAAAGAGATTGTATTGCTGTT
 TTGAAAGAATTAGCAGATTGGCCGATGATTGAGAACCAACTGTGAGAGCGGAGCTGATGGAACAGGTGC
 CTCACATCGCACTGTTTTGTCAAGAAAACCGCCCTTCAATACCATATGCTTTTTCAAATTTCTACTACC
 TATTGTGGTTAGATACCTTGAGATCAGAATAATCAGGTGAGGAAAACAAGTCAGGCAGCTTTGCTGGCT
 CTGTTGGAGCAGGAGCTCATTGAACGATTTGATGTGGAGACCAAAGTGTGCCCTGTCTCATAGAGCTGA
 CAGCCCCAGATAGCAATGATGATGTGAAAACAGAAGCTGTGGCTATAATGTGCAAAATGGCTCCCATGGT
 TGGGAAGGATATTACAGAGCGTCTTATCCTCCCTAGGTTTTGTGAGATGTCTGCGATTGCAGAATGTTT
 CAGGTTGAAAAGTCTGTGCTGCCAATTTTGGAGATATTTGCAGTGTAGTTGGCCAGCAAGCTACTGAAG
 AAATGTTGCTGCCAGATTTTTCCAGCTTTGTTCTGATAATGTATGGGGAGTCCGAAAGGCTTGTGCTGA
 ATGCTTCATGGCGGTTTCATGTGCAACATGTCAAGAAATCCGACGGACCAAATTCAGCACTTTTTATT
 AATTTGATCAGTGATCCTTACGTTGGGTTTCGCCAAGCAGCTTTTCAGTCTCTGGGACCTTTCATATCTA
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 TCAGATCTCAGTGTTAGTAATCCAGTGCATACTGGAAAACACGATGGAAGACCATGCTGCTGAGGCAT
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 CCGCTGCACTACGTGCTCCAGCCTGGATGCACATGAAGAGACCATCAGTATAGAAAAGAGAAGTGATTT
 GCAAGATGAACTGGATATAAATGAGCTACCAAATGTAAAATAAATCAAGAAGATTCTGTGCCTTTAATC
 AGCGATGCTGTTGAGAATATGGACTCCACTTCTACTATATTCACAGCGATTCAGACTTGAGCAACAATA
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 AGCTGCACGCGGCAACACCACCAACGTTTCGGAGTGGACCTCATCAATGAGCTTGTGGAGAAGTTTGGCAG
 ATGTCCCAAGTGGTCTGGTTCGGCAAGCCTTTGTCTTTGTCTGCCAGACTGTCATTGAGGATGACTGCCTT
 CCCATGGACCAGTTTGTGTGCATCTCATGCCGCATCTGCTAACCTTAGCAAAATGACAGGGTTTCTAACG
 TGCAGTGTGCTTGCAAAAGACATTAAGACAACTCTACTAGAAAAGACTATTTCTTGGCCTCTGCCAG
 CTGCCACCAGGAGGCTGTGGAGCAGACCATCATGGCTCTCAGATGGACCGTGACAGCGATGTCAAGTAT
 TTTGCAAGCATCCACCCTGCCAGTACCAAATCTCCGAAGATGCCATGAGCACAGCGTCTCAACCTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209255 protein sequence
 Red=Cloning site Green=Tags(s)

MADLSLLQEDLQEDADGSLDFVSDQDEMLTPLGRLDKYAASENIFNRQMVARSLDLTLREVCDDERDCIAV
 LERISRLLADDSEPTVRAELMEQVPHIALFCQENRPSIPYAFSKFLLPIVVRYLADQNNQVRKTSQAALLA
 LLEQELIERFDVETKVCPLVIELTAPDSNDDVKTEAVAIMCKMAPVMGKDITERLILPRFCMCCDCRMF
 HVRKCAANFGDICSVVGQQATEEMLLPRFFQLCSDNVWGVKAKAEFCMAVSCATCQEIRRKLKLSALFI
 NLI SDPSRWVRQAQFQSLGPFISTFANPSSSGQYFKEESKSSSEMSVENKNRTRDQEAPEDVQVRPEDTP
 SDLVSNSSVILENTMEDHAAEASGKPLGEISVPLDSSLLCTLSSESHQEASNENDKKPGNYKSMRLRPE
 VGTTSQDSALLDQELYNFHFWRTPLEIDLIELEQNSGGKPSPEGPEEESEGPVSPSSNITMATRKEL
 EEMIENLEPHIDDPVKAQVEVLSAALRASSLDAHEETISIEKRSDLQDELINELPNCKINQEDSVPLI
 SDAVENMDSTLHYIHSDSLSNSSFSPEERRTKVQDVVPQALLDQYLSMTDPSRAQTVDTETIAKHCA
 YSLPGVALTLGRQNWHLRETYETLASDMQWKVRRTLAFSIHELAVILGDQLTAADLVPIFNGLKDLDEV
 RIGVLKHLHDFLKLHIDKRRELYQLQEFVLT DNSRNWRFRAELAEQLILLELYSPRDVYDYLRLPIAL
 NLCADKVVSVRWISYKLVSEMVKKLHAATPPTFGVDLINELVENFGRCPKWSGRQAFVFCQTVIEDDCL
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 FASIH PASTKISEDAMSTASTY

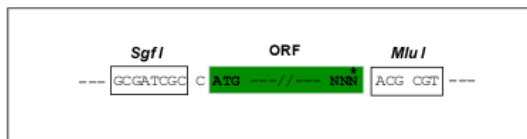
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6218_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



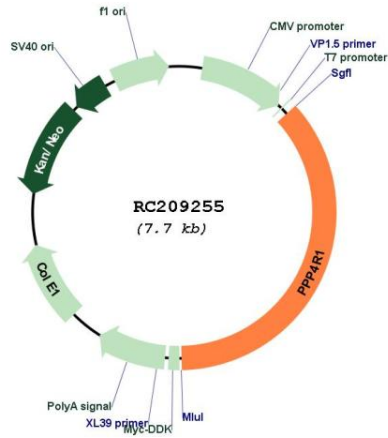
* The last codon before the Stop codon of the ORF

ACCN: NM_005134

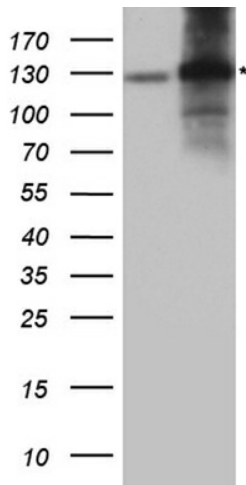
ORF Size: 2799 bp

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:	<ol style="list-style-type: none">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_005134.4
RefSeq Size:	3929 bp
RefSeq ORF:	2802 bp
Locus ID:	9989
UniProt ID:	Q8TF05
Cytogenetics:	18p11.22
Domains:	HEAT
Protein Families:	Druggable Genome, Phosphatase
MW:	105.2 kDa
Gene Summary:	This gene encodes one of several alternate regulatory subunits of serine/threonine protein phosphatase 4 (PP4). The protein features multiple HEAT repeats. This protein forms a complex with PP4RC. This complex may have a distinct role from other PP4 complexes, including regulation of HDAC3 (Zhang et al., PMID: 15805470). There is also a transcribed pseudogene on chromosome 20. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2012]

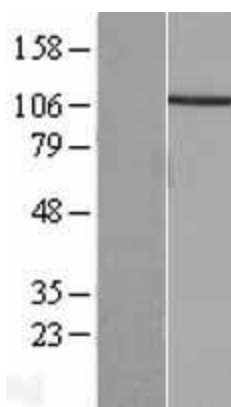
Product images:



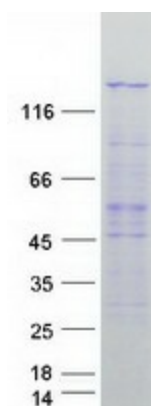
Circular map for RC209255



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PPP4R1 (Cat# RC209255, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PPP4R1 rabbit polyclonal antibody (Cat# [TA890169]).



Western blot validation of overexpression lysate (Cat# [LY417496]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209255 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PPP4R1 protein (Cat# [TP309255]). The protein was produced from HEK293T cells transfected with PPP4R1 cDNA clone (Cat# RC209255) using MegaTran 2.0 (Cat# [TT210002]).