

## 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)



[View online »](#)

**ORF Nucleotide Sequence:**

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGGACCTCTCGCTGCTTCAGGAGGACCTGCAGGAGGACGCAGACGGATCCCTGGACTTTGTCTCAC  
 AAGATGAAATGTTGACGCCCTGGGAGATTGGACAAGTATGCTGCAAGTGAGAACATATTTAACAGACA  
 AATGGTGGCCCGGAGTTTCTCGATACCTTGAGGAAAGTCTGCGATGATGAAAGAGATTGTATTGCTGTT  
 TTGAAAGAATTAGCAGATTGGCCGATGATTGAGAACCAACTGTGAGAGCGGAGCTGATGGAACAGGTGC  
 CTCACATCGCACTGTTTTGTCAAGAAAACCGCCCTTCAATACCATATGCTTTTTCAAATTTCTACTACC  
 TATTGTGGTTAGATACCTTGAGATCAGAATAATCAGGTGAGGAAAACAAGTCAGGCAGCTTTGCTGGCT  
 CTGTTGGAGCAGGAGCTCATTGAACGATTTGATGTGGAGACCAAAGTGTGCCCTGTCTCATAGAGCTGA  
 CAGCCCCAGATAGCAATGATGATGTGAAAACAGAAGCTGTGGCTATAATGTGCAAAATGGCTCCCATGGT  
 TGGGAAGGATATTACAGAGCGTCTTATCCTCCCTAGGTTTTGTGAGATGTCTGCGATTGCAGAATGTTT  
 CAGGTTGAAAAGTCTGTGCTGCCAATTTTGGAGATATTTGCAGTGTAGTTGGCCAGCAAGCTACTGAAG  
 AAATGTTGCTGCCAGATTTTTCCAGCTTTGTTCTGATAATGTATGGGGAGTCCGAAAGGCTTGTGCTGA  
 ATGCTTCATGGCGGTTTCATGTGCAACATGTCAAGAAATCCGACGGACCAAATTATCAGCACTTTTTATT  
 AATTTGATCAGTGATCCTTACGTTGGGTTTCGCCAAGCAGCTTTTCAGTCTCTGGGACCTTTTCATATCTA  
 CTTTTGCTAATCCATCTAGCTCAGGCCAGTATTTTAAAGAAGAAAGCAAAAGTTCAGAAGAGATGTCAGT  
 AGAAAACAAAAATAGGACCAGAGATCAAGAAGCCCCAGAGGATGTACAAGTCAGGCCAGAGGATACTCCT  
 TCAGATCTCAGTGTTAGTAATCCAGTGCATACTGGAAAACACGATGGAAGACCATGCTGCTGAGGCAT  
 CCGGGAAGCCTCTAGGTGAAATAGTGTCCACTGGACAGCTTTTACTTTGTACTTTGCTCCTCAGATC  
 TCACCAGGAAGCAGCTAGTAATGAGAATGATAAAAAACCTGGTAACTACAATCTATGTTACGACCAGAG  
 GTTGGCACCACCTTCAAGATTAGCTCTCTTAGATCAGGAATTGTATAACTCCTTCCATTTCTGGAGGA  
 CTCCTCTTCTGAAATAGATCTAGACATAGAGCTTGAACAGAACTCTGGGGGAAAACCCAGCCAGAGGG  
 ACCAGAGGAAGAATCTGAGGGCCCTGTGCCAGTTCTCCAACATCACCATGGCCACCAGAAAGGAAGTCTG  
 GAAGAAATGATAGAAAATCTAGAGCCCCACATTGATGATCCAGATGTTAAAGCACAAGTGGAAAGTCTGT  
 CCGCTGCACTACGTGCTCCAGCCTGGATGCACATGAAGAGACCATCAGTATAGAAAAGAGAAGTGATTT  
 GCAAGATGAAGTGGATATAAATGAGCTACCAAATGTAAAATAAATCAAGAAGATTCTGTGCCTTTAATC  
 AGCGATGCTGTTGAGAATATGGACTCCACTTCTACTATATTCACAGCGATTCAGACTTGAGCAACAATA  
 GCAGTTTTAGCCCTGATGAGGAAAGGAGAACTAAAGTACAAGATGTTGTACCTCAGGCGTTGTTAGATCA  
 GTATTTATCTATGACTGACCCCTTCTCGTGACAGACGGTTGACACTGAAATGCTAAGCACTGTGCATAT  
 AGCCTCCCTGGTGTGGCCTTGACACTCGGAAGACAGAATTGGCACTGCCTGAGAGAGACGTATGAGACTC  
 TGGCCTCAGACATGCAGTGGAAAGTTCGACGAACCTTAGCATTCTCCATCCACGAGCTTGCAGTTATTCT  
 TGGAGATCAATTGACAGCTGCAGATCTGGTTCCAATTTTTAATGGATTTTTAAAAGACCTCGATGAAGTC  
 AGGATAGGTGTTCTTAAACACTTGCATGATTTTCTGAAGCTTCTCATATTGACAAAAGAAGAGAATATC  
 TTTATCAACTTCAGGAGTTTTTGGTGACAGATAATAGTAGAAAATGGCGGTTTCGAGCTGAACTGGCTGA  
 ACAGCTGATTTTACTTCTAGAGTTATATAGTCCCAGAGATGTTTATGACTATTTACGTCCCATTGCTCTG  
 AATCTGTGTGCAGACAAAGTTTCTTCTGTTGTTGATTTCCTACAAGTTGGTCAGCGAGATGGTGAAGA  
 AGCTGCACGCGGCAACACCACCAACGTTTCGGAGTGGACCTCATCAATGAGCTTGTGGAGAAGTTTGGCAG  
 ATGTCCCAAGTGGTCTGGTTCGGCAAGCCTTTGTCTTTGTCTGCCAGACTGTCATTGAGGATGACTGCCTT  
 CCCATGGACCAGTTTGTGTGCATCTCATGCCGCATCTGCTAACCTTAGCAAAATGACAGGGTTTCTAACG  
 TGCAGTGTGCTTGCAAAAGACATTAAGACAACTCTACTAGAAAAGACTATTTCTTGGCCTCTGCCAG  
 CTGCCACCAGGAGGCTGTGGAGCAGACCATCATGGCTCTCAGATGGACCGTGACAGCGATGTCAAGTAT  
 TTTGCAAGCATCCACCCTGCCAGTACCAAATCTCCGAAGATGCCATGAGCACAGCGTCTCAACCTAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

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

MADLSLLQEDLQEDADGSLDFVSDQDEMLTPLGRLDKYAASENIFNRQMVARSLDLTLREVCDDERDCIAV  
 LERISRLLADDSEPTVRAELMEQVPHIALFCQENRPSIPYAFSKFLLPIVVRYLADQNNQVRKTSQAALLA  
 LLEQELIERFDVETKVCVPLIELTAPDSNDDVKTEAVAIMCKMAPMVGKDITERLILPRFCMCCDCRMF  
 HVRKCAANFGDICSVVGQQATEEMLLPRFFQLCSDNVWGVKAKAEFCMAVSCATCQEIRRKLKLSALFI  
 NLI SDPSRWVRQA AFQSLGPFISTFANPSSSGQYFKEESKSSSEMSVENKNRTRDQEAPEDVQVRPEDTP  
 SDL SVSNSSVILENTMEDHAAEASGKPLGEISVPLDSSLLCTLSSESHQEASNENDKKPGNYKSMRLPE  
 VGTTSQDSALLDQELYN SFHFWRTPLPEIDLIELEQNSGGKPSPEGPEEESEGPVSPSSNITMATRKEL  
 EEMIENLEPHIDDPVKAQVEVLSAALRASSLDAHEETISIEKRSDLQDELINELPNCKINQEDSVPLI  
 SDAVENMDSTLHYIHSDSLSNSSSFSPDEERTKVQDVVPQALLDQYLSMTDPSRAQTVDTEIAKHCA  
 YSLPGVALTLGRQNWHLRETYETLASDMQWKVRRTLAFSIHELAVILGDQLTAADLVPIFNGLKDLDEV  
 RIGVLKHLHDFLKLHIDKRRELYQLQEFVLT DNSRNWRFRAELAEQLIL LLELYSPRDVYDYL RPIAL  
 NLCADKVSSVRWISYKLVSEMVKKLHAATPPTFGVDLINELVENFGRCPKWSGRQAFVFCQTVIEDDCL  
 PMDQFAVHLMPHLLTLANDRVPNVRVLLAKTLRQTLLLEKDYFLASASCHQEAVEQTIMALQMDRDSVVK  
 FASIH PASTKISEDAMSTASSTY

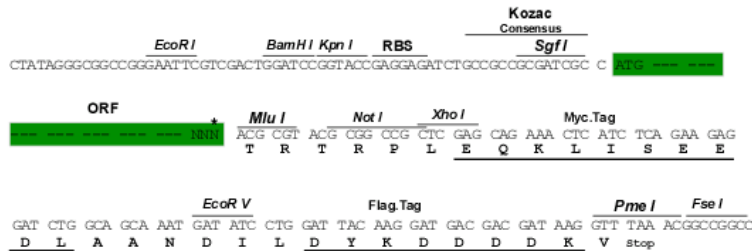
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6218\\_h01.zip](https://cdn.origene.com/chromatograms/mk6218_h01.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



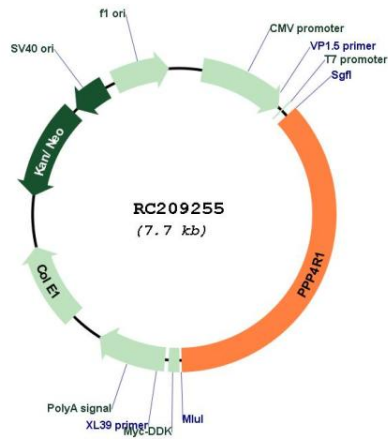
\* The last codon before the Stop codon of the ORF

ACCN: NM\_005134

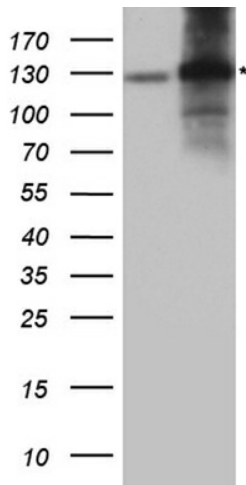
ORF Size: 2799 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_005134.4</a>
<b>RefSeq Size:</b>	3929 bp
<b>RefSeq ORF:</b>	2802 bp
<b>Locus ID:</b>	9989
<b>UniProt ID:</b>	<a href="#">Q8TF05</a>
<b>Cytogenetics:</b>	18p11.22
<b>Domains:</b>	HEAT
<b>Protein Families:</b>	Druggable Genome, Phosphatase
<b>MW:</b>	105.2 kDa
<b>Gene Summary:</b>	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]

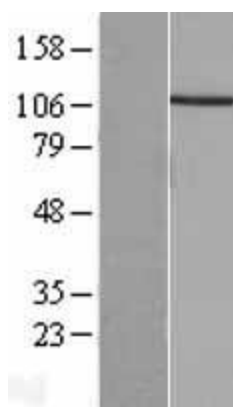
Product images:



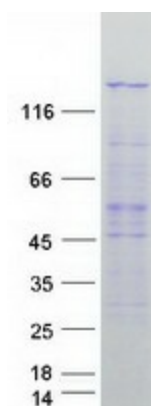
Circular map for RC209255



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]).