

## Product datasheet for **RC202072**

### MEG1 (PTPN4) (NM\_002830) Human Tagged ORF Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                             |
| Product Name:             | MEG1 (PTPN4) (NM_002830) Human Tagged ORF Clone |
| Tag:                      | Myc-DDK   |
| Symbol:                   | MEG1  |
| Synonyms:                 | MEG; PTPMEG; PTPMEG1                            |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)                          |
| E. coli Selection:        | Kanamycin (25 ug/mL)                            |



[View online »](#)

**ORF Nucleotide Sequence:**

>RC202072 representing NM\_002830  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGACCTCACGTTTCCGATTGCCTGCTGGCAGAACCTACAATGTACGAGCATCAGAGTTGGCCCGAGACA  
 GACAGCATACTGAAGTGGTTTGCAACATCCTTCTCTGGATAAACAAGCTTCAAAAGTCAATAA  
 ACATGATCAGGGGCAAGTCTTGTGGATGTCGTCTTCAAGCATCTAGATTTGACTGAGCAGGACTATTTT  
 GGTTTACAGTTGGCTGATGATTCCACAGATAACCCAAGGTGGCTGGATCCAAACAAACAAATAAGGAAGC  
 AGCTAAAGAGAGGATCTCCTTACAGTTTGAACCTTAGAGTCAAATTTTTTGAAGTGACCCCAACAAGTT  
 ACAAGAAGAATATAACAAGTACCAGTATTTTTGCAAATTAACAAGACATTCTTACTGGAAGATTACCC  
 TGCTCTTCTAATACTGCTGCCCTTTAGCTTCATTTGCTGTTGAGTCTGAACTTGGAGACTACGATCAGT  
 CAGAGAAGTTGTCAGGCTACCTCTCAGATTATTCTTTTCATTCCTAATCAACCTCAAGATTTTGAAAAA  
 AATTGCAAAATACATCAGCAACACATAGGCTTATCTCCTGCAGAAGCAGAAATTAATTACCTAAACACA  
 GCACGTACCTTAGAACTCTATGGAGTTGAATCCACTATGCAAGGGATCAGAGTAAACAATGAAATATGA  
 TTGGAGTGATGTCAGGAGGAATTCGATTATAAGAACAGGGTACGAATGAATACCTTTCCATGGTTGAA  
 GATTGTAAAAATTTCTTTAAGTGCAAACAGTTTTTTATTCAACTTAGAAAAAATTGCATGAATCTAGA  
 GAAACATTATTGGGATTAATATGGTGAATTACAGAGCATGTAAAAATTTGTGGAAGCATGTGTAGAAC  
 ATCACACATTCTCCGTTTGGACAGACCACTTCCACCTCAAAGAATTTTTTGCACATTATTTTACATT  
 AGGTTCAAATTCGGTACTGTGGGAGAAGTGAAGTCCAATCAGTTCAGTATGGCAAAGAAAAGGCCAAAT  
 AAAGACAGGGTATTTGCAAGATCCCAAGTAAAGCCCTTGGCACGGAATTAATGGATTGGGAAGTAGTAA  
 CAGAAAATCAATCTGATGACAGGTTAGAAACACAAAAGTCTCCATCAGCATCTCCACCGGAACTCC  
 TAATCATCGAAATTCACATTCACGCAGGAAGGAACCCGGTTACGACCATCTTCAGTTGGTCATTTGGTA  
 GACCATATGGTTCATACTTCCCCAAGCGAAGTGTGTAATCAGAGATCTCCGTCATCAACACAAGCTA  
 ATAGCATTGTTCTGGAATCATCACCATCACAAGAGACCCCTGGAGATGGGAAGCCTCCAGCTTTACCACC  
 CAAACAGTCAAAGAAAAACAGTTGGAACCAAATTCATTATTCACATTCGCAACAAGATCTAGAAAGTCAT  
 ATTAATGAAACATTTGATATCCATCTTCTCCTGAAAAACCCACTCCTAATGGTGGTATTCCACATGATA  
 ATCTTGTCTAATCAGAATGAAACCTGATGAAAATGGGAGGTTGGATTCAATGTAAAGGGAGGATATGA  
 TCAGAAGATGCCTGTGATTGTGCTCGAGTAGCACCAGGAACACCTGCTGACCTCTGTGTCCTAGACTG  
 AATGAAGGGGACCAAGTTGACTGATCAATGGTGGGACATTGCAGAACACACTCATGATCAGTTGTGC  
 TGTTTATAAAGCTAGTTGTGAGAGACATTCTGGGAACTCATGCTTCTAGTTCCACCTAATGCTGTATA  
 TGATGTAGTGAAGAAAAGCTAGAAAATGAGCCAGATTTCCAGTATATTCCTGAGAAAGCCCACTAGAT  
 AGTGTGCATCAGGATGACCATTCCCTGCGGGAGTCAATGATCCAGCTAGCTGAGGGGCTTACACTGGAA  
 CAGTCTGACACAGTTTGTCAACTGTATCGGAAAAACCTGGAATGACAATGTCCTGTGCCAAATACC  
 TCAGAATATTTCCAAAAATAGATACAGAGATATTTGCGCTTATGATGCCACACGGGTCATTTTAAAGGT  
 AATGAAGACTACATCAATGCGAACTATATAAATATGGAATTCCTTCTCCAGCATTATAAATCAGTACA  
 TTGCTTGTCAAGGGCCATTACCACACACTTGTACAGATTTTGGCAGATGACTTGGGAACAAGGCTCCTC  
 TATGGTTGTAATGTTGACCACACAAGTTGAACGTGGCAGAGTAAATGTCACCAATATTGGCCAGAACC  
 ACAGGCAGTTCATCTTATGGATGCTACCAAGTTACCTGCCACTCTGAAGAAGGAAACACTGCCTATATCT  
 TCAGGAAGATGACCCATTTAAACCAAGAGAAAAATGAAAGTCGTCCACTCACTCAGATCCAGTACATAGC  
 CTGGCCTGACCATGGAGTCCCTGATGATTGAGTACTTTCTAGATTTTGTGTCATGTACGAAACAAG  
 AGGGCTGGCAAGGAAGAACCCTGTTGTCCATTGCAAGTCTGGAATCGGAAGAACTGGGTTCTTATTA  
 CTATGGAAACAGCCATGTGTCTCATTGAATGCAATCAGCCAGTTTATCCACTAGATATTGAAGAACAAT  
 GAGAGATCAGCGAGCCATGATGATCCAACACCTAGTCAATACAGATTTGTATGTGAAGCTATTTTGAAA  
 GTTTATGAAGAAGGCTTTGTTAAACCTTAACAACATCAACAAAATAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGAT AAGGTTTAA

**Protein Sequence:** >RC202072 representing NM\_002830  
 Red=Cloning site Green=Tags(s)

MTSRFRLPAGRTYNVRASELARDRQHTEVVCNILLDNTVQAFKVNKHDQGQVLLDVVFKHLDLTEQDYF  
 GLQLADDSTDNPRWLDPNKPIRKQLKRGSPYSLNFRVKFFVSDPNKLQEEYTRYQYFLQIKQDILTGRLP  
 CPSNTAALLASFVQSELGDYDQSENLSGYLSDYSFIPNQPDFFEKEIAKLHQHIGLSPAEAFNYLNT  
 ARTLELYGVEFHYARDQSNNEIMIGVMSGGILYKNRVRMNTFPWLKIVKISFKCKQFFIQLRKELHESR  
 ETLLGFNMVNYRACKNLWKACVEHHTFFRLDRPLPPQKNFFAHYFTLGSKFRYCGRTEVQSVQYGKEKAN  
 KDRVFAVSPSKPLARKLMDWEVVSRSNISDDRLETQSLPSRSPGTPNHRNSTFTQEGTRLRPSVGHV  
 DHMVHTSPSEVFNQRSPSTQANSIVLESSPSQETPGDGKPPALPPKQSKKNSWNQIHYSHSQQDLESH  
 INETFIDIPSSPEKPTPNGGIPHDNLVLRMMPDENGRFGFNVKGGYDQKMPVIVSRVAPGTPADLCVPR  
 NEGDAQVLLINGRDIAEHTHDQVVLFIKASCERHSGELMLLVRPNAVYDVVEKLENEPDFQYIPEKAPLD  
 SVHQQDDHSLRESMIQLAEGITGTVLTFQFDQLYRKKPGMTMSCAKLPQNI SKNRYRDISPYDTRVILKG  
 NEDYINANYINMEIPSSIIINQYIACQGPLPHTCTDFWQMTWEQSSMVVMLTTQVERGRVKCHQYWPEP  
 TGSSSYGCVQVTHSEEGNTAYIFRKMTLFNQEKNESRPLTQIQYIAWPDHGVDDSSDFLDFVCHVRNK  
 RAGKEEPVVVHCSAGIGRTGVLITMETAMCLIECNQPVYPLDIVRTMRDQRAMMIQTPSQYRFVCEAILK  
 VYEEGFVKPLTTSTNK

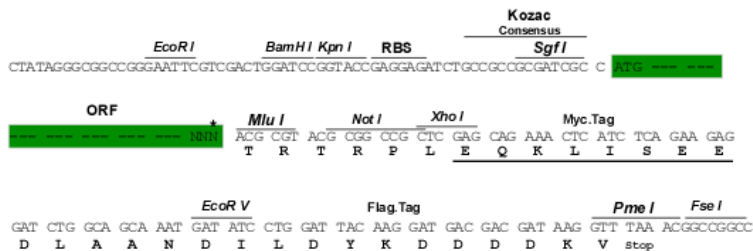
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg4255\\_b07.zip](https://cdn.origene.com/chromatograms/mg4255_b07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



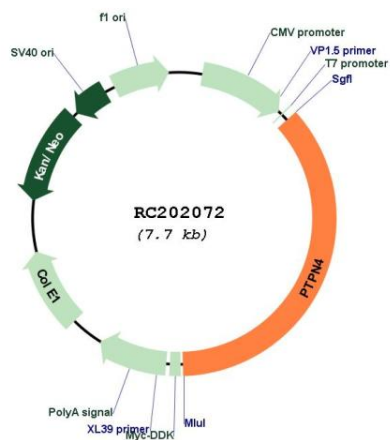
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002830

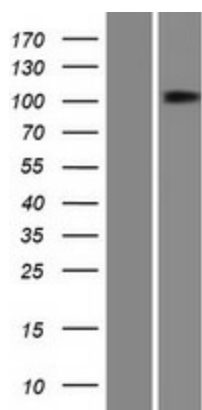
**ORF Size:** 2778 bp

|                               |  |
|-------------------------------|--|
| <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>RefSeq:</b>                | <a href="#">NM_002830.4</a>  |
| <b>RefSeq Size:</b>           | 3963 bp  |
| <b>RefSeq ORF:</b>            | 2781 bp  |
| <b>Locus ID:</b>              | 5775   |
| <b>UniProt ID:</b>            | <a href="#">P29074</a>   |
| <b>Cytogenetics:</b>          | 2q14.2   |
| <b>Domains:</b>               | Y_phosphatase, B41, PDZ, PTPc_motif  |
| <b>Protein Families:</b>      | Druggable Genome, Phosphatase  |
| <b>MW:</b>                    | 105.7 kDa  |
| <b>Gene Summary:</b>          | The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This protein contains a C-terminal PTP domain and an N-terminal domain homologous to the band 4.1 superfamily of cytoskeletal-associated proteins. This PTP has been shown to interact with glutamate receptor delta 2 and epsilon subunits, and is thought to play a role in signalling downstream of the glutamate receptors through tyrosine dephosphorylation. [provided by RefSeq, Jul 2008] |

Product images:



Circular map for RC202072



Western blot validation of overexpression lysate (Cat# [LY419065]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202072 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).