

Product datasheet for **RC201754**

MPP1 (NM_002436) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MPP1 (NM_002436) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MPP1
Synonyms:	AAG12; DXS552E; EMP55; MRG1; PEMP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC201754 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACCCTCAAGCGAGCGAGGGCGAGAGTGGGGCAGCATGCACACGGCGCTCTCCGACCTCTACCTGG
 AGCATTTGCTGCAGAAGCGTAGTCGGCCAGAGGCTGTATCGCATCCATTGAATACTGTGACCGAGGACAT
 GTACACCAACGGGTCTCCTGCCCGAGTAGCCCTGCCAGGTCAAGGGACAGGAGGTGCGAAAAGTGCGA
 CTCATACAGTTTGAAGGTACAGAAGAGCCCATGGGAATCACGCTGAAGCTGAATGAAAAACAGTCCT
 GTACGGTGGCCAGAATTCCTCATGGTGGCATGATCCATAGACAAGGCTCCCTTACGTTGGGGATGAGAT
 CCTAGAAATCAATGGCACAATGTGACAAATCATTCACTGGATCAGTGCAGAAGCGATGAAAGAAACC
 AAAGGAATGATCTCATAAAAGTAATCCCAACCAGCAAAGCCGCTTCTCTGACTACAGATGTTTCATGA
 GAGCGCAGTTGACTATGATCCAAAAAGGACAATCTGATCCCTTGAAGGAGGGCGGACTGAAGTTTGC
 TACTGGGGACATTATCCAGATTATCAACAAGGATGACAGCAATTGGTGGCAGGGACGGGTGGAAGGCTCC
 TCCAAGGAGTCAGCAGGATTGATCCCTTCCCTGAGCTGCAGGAATGGCGAGTGGCAAGTATGGCTCAGT
 CAGCTCCTAGCGAAGCCCGAGCTGCAGTCCCTTTGGGAAGAAGAAGTACAAAGACAATATCTGGC
 CAAGCACAGCTCGATTTTGTATCAGTTGGATGTTGTTTCTACGAGGAAGTGTTCGGCTCCCTGCATTC
 AAGAGGAAGACCTGGTGTGATCGGAGCCAGTGGGGTGGTTCGACGCCACATTAAGAATGCCCTGCTCA
 GCCAGAATCCGGAGAAGTTTGTGTACCTGTCCCATATACAACACGGCCCAAGGAAGAGTGAAGGAAGA
 TGGGAAGGAGTACCACTTATCTCAACGGAGGAGATGACGAGGAACATCTCTGCCAATGAGTTCTTGGAG
 TTTGGCAGCTACCAAGGAACATGTTTGGCACCAAAATTTGAAACAGTGCACCAGATCCATAAGCAGAACA
 AGATTGCCATCCTTGACATTGAGCCCCAGACCTGAAAATTTGTTGGACAGCAGAACTTTGCGCTTTCAT
 TGTGTTTCACTGACCTACTGACCAGGGCACTCAGACAGAAGCCCTGCAGCAGCTGCAGAAGGACTCTGAG
 GCCATCCGACGACGACTACGCTACTACTTTGACCTCTACTGGTCAATAATGGTGTGATGAAACCTTA
 AGAAATACAAGAAGCCTTCGACCAAGCGTGCAGTTCTCCACAGTGGGTGCCTGTCTCTGGGTTTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201754 protein sequence
 Red=Cloning site Green=Tags(s)

MTLKASEGESGGSMHTALSDLYLEHLLQKRSRPEAVSHPLNVTEDMYTNGSPAPGSPAQVKQEVKVR
 LIQFEKVTEEPMGITLKLNEKQCTVARILHGGMIHRQSLHVGDEILEINGTNTNHSVDLQKAMKET
 KGMISLKVIPNQSRPALQMFRAQFDYDPKKNLIPCKEAGLK FATGDIIQIINKDSDSNWQGRVEGS
 SKESAGLIPSPQLQEWVASMASAPSEAPSCSPFGKKKKYKDKYLAKHSSIFDQLDVVSYEEVRLPAF
 KRKTLVLI GASGVGRSHIKNALLSQNPEK FVYPYPTTRPPKSEEDGKEYHFISTEEMTRNISANEFLE
 FGSYQGNMFGTKFETVHQIHKQNKIAILDIEPQTLKIVRTAELSPFIVFIAPTDQGTQTEALQQLQKDSE
 AIRSQYAHYFDLSLVNNGVDETLKQLQEAQACSSPQWVPSWVY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6093_c09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_002436

ORF Size: 1398 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.

RefSeq: [NM_002436.4](#)

RefSeq Size: 2067 bp

RefSeq ORF: 1401 bp

Locus ID: 4354

UniProt ID: [Q00013](#)

Cytogenetics: Xq28

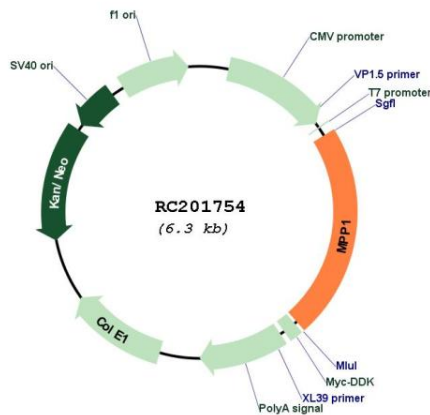
Domains: SH3, PDZ, Guanylate_kin, GuKc

Protein Families: Druggable Genome

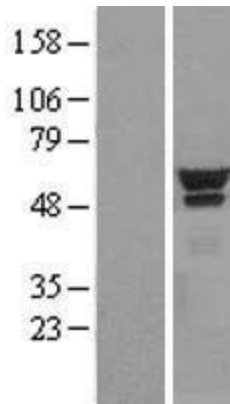
MW: 52.3 kDa

Gene Summary: This gene encodes the prototype of the membrane-associated guanylate kinase (MAGUK) family proteins. MAGUKs interact with the cytoskeleton and regulate cell proliferation, signaling pathways, and intercellular junctions. The encoded protein is an extensively palmitoylated membrane phosphoprotein containing a PDZ domain, a Src homology 3 (SH3) motif, and a guanylate kinase domain. This gene product interacts with various cytoskeletal proteins and cell junctional proteins in different tissue and cell types, and may be involved in the regulation of cell shape, hair cell development, neural patterning of the retina, and apico-basal polarity and tumor suppression pathways in non-erythroid cells. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

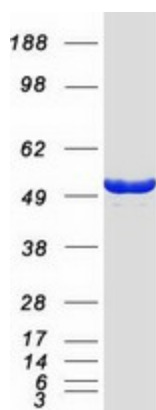
Product images:



Circular map for RC201754



Western blot validation of overexpression lysate (Cat# [LY419325]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201754 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MPP1 protein (Cat# [TP301754]). The protein was produced from HEK293T cells transfected with MPP1 cDNA clone (Cat# RC201754) using MegaTran 2.0 (Cat# [TT210002]).