

## Product datasheet for **RC230095**

### **MPP1 (NM\_001166461) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MPP1 (NM_001166461) 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:**

>RC230095 representing NM\_001166461  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGACCCTCAAGCGAGCGAGGGCGAGAGTGGGGCAGCATGCACACGGCGCTCTCCGACCTCTACCTGG  
 AGCATTTGCTGCAGAAGCGTAGTCGGCCAGAGGCTGTATCGCATCCATTGAATACTGTGACCGAGGACAT  
 GTACACCAACGGGTCTCCTGCCCGAGTAGCCCTGCCAGGTCAAGGGACAGGAGGTGCGAAAAGTGCGA  
 CTCATACAGTTTGAAGGTACAGAAGAGCCCATGGGAATCACGCTGAAGCTGAATGAAAAACAGTCTT  
 GTACGGTGGCCAGAATTCTTTCATGGTGGCATGATCCATAGACAAGGCTCCCTTACGTTGGGGATGAGAT  
 CCTAGAAATCAATGGCACAATGTGACAAATCATTCACTGGATCAGTGCAGAAGGCGATGAAAGAAACC  
 AAAGGAATGATCTCATAAAAGTAATCCCAACCAGCAAAGCCGCTTCTCTGCACTACAGGAGCGGGAC  
 TGAAGTTTGTACTGGGACATTATCCAGATTATCAACAAGGATGACAGCAATTGGTGGCAGGGACGGGT  
 GGAAGGCTCCTCAAGGAGTCAAGGATTGATCCCTTCCCTGAGCTGCAGGAATGGCGAGTGGCAAGT  
 ATGGCTCAGTCAGTCTAGCGAAGCCCGAGCTGCAGTCCCTTTGGGAAGAAGAAGTACAAAGACA  
 AATATCTGGCCAAGCACAGCTCGATTTTGTATCAGTTGGATGTTGTTTCTACGAGGAAGTCGTTCCGGCT  
 CCCTGCATTCAAGAGGAAGACCCCTGGTGTGATCGGAGCCAGTGGGGTGGTTCGACGCCACATTAAGAAT  
 GCCCTGCTCAGCCAGAATCCGGAGAAGTTTGTGTACCCTGTCCATATACAACACGGCCGCCAAGGAAGA  
 GTGAGGAAGATGGGAAGGAGTACCATTATCTCAACGGAGGAGATGACGAGGAACATCTCTGCCAATGA  
 GTTCTTGGAGTTTGGCAGCTACCAAGGCAACATGTTTGGCACAAATTTGAAACAGTGCACCAGATCCAT  
 AAGCAGAAACAAGATTGCCATCCTTGACATTGAGCCCCAGACCTGAAAATTTGTTCCGACAGCAGAACTTT  
 CGCCTTTCATTGTGTTTCTTGCACCTACTGACCGGGCACTCAGACAGAAGCCCTGCAGAGTGCAGAA  
 GGACTCTGAGGCCATCCGACGCCAGTACGCTCACTACTTTGACCTCTACTGGTCAATAATGGTGTGAT  
 GAAACCCTTAAGAAATTACAAGAAGCCTTCGACCAAGCGTGCAGTTCTCCACAGTGGGTGCCTGTCTCT  
 GGGTTTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC230095 representing NM\_001166461  
 Red=Cloning site Green=Tags(s)

MTLKASEGESGGSMHTALSDLYLEHLLQKRSRPEAVSHPLNVTEDMYTNGSPAPGSPAQVKQGEVRKVR  
 LIQFEKVTEEPMGITLKLNEKQCTVARILHGGMIHRQGLSHVGDEILEINGTNTNHSVDLQKAMKET  
 KGMISLKVIPNQSRPALQEAGLKFATGDI IQIINKDDSNWWQGRVEGSSKESAGLIPSELQEWVAVAS  
 MAQSAPSEAPSCSPFGKKKKYKDKYLAKHSSIFDQLDVVSYEEVVRPLPAFKRKTLLVIGASGVGRSHIKN  
 ALLSQNPEKFFVYPYTRPPRKSEEDGKEYHFISTEEMTRNISANEFLEFGSYQGNMFGTKFETVHQIH  
 KQNKIAILDIEPQTLKIVRTAELSPFIVFIAPTDQGTQTEALQQLQKDSEAIRSQYAHYFDLSLVNNGVD  
 ETLKKLQEAFDQACSSPQWVPVSWVY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8060\\_e08.zip](https://cdn.origene.com/chromatograms/mk8060_e08.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:** NM\_001166461

**ORF Size:** 1338 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\\_001166461.2](#)
**RefSeq ORF:** 1341 bp

**Locus ID:** 4354

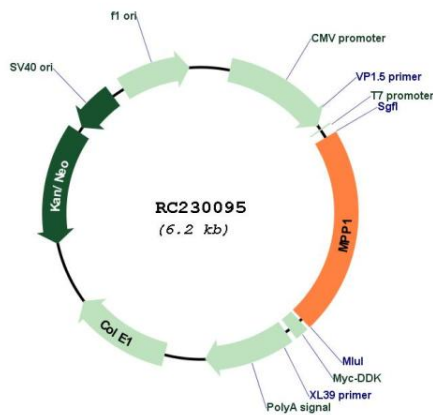
**UniProt ID:** [Q00013](#)
**Cytogenetics:** Xq28

**Protein Families:** Druggable Genome

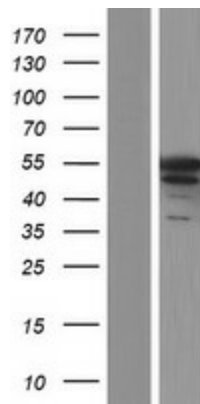
**MW:** 50.3 kDa

**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 RC230095



Western blot validation of overexpression lysate (Cat# [LY433095]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230095 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).