

## Product datasheet for **RC234635**

### **MPP5 (NM\_001256550) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MPP5 (NM_001256550) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MPP5
Synonyms:	PALS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>RC234635 representing NM\_001256550  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTGTTGACTGCCCTGGAGATTTGGGCACCAGGATGATGCCAATACGTCGAAGTGCACAGTTGGAGC  
 GTATTCGGCAACAACAGGAGGACATGAGGCGTAGGAGAGAGGAAGAAGGGAAAAAGCAAGAACTTGACCT  
 TAATTCCTCCATGAGACTTAAGAAACTAGCCCAAATTCCTCCAAAGACCGGAATAGATAACCCTATGTTT  
 GATACAGAGGAAGGAATTGTCTTAGAAAGTCCTCATTATGCTGTGAAAATATTAGAAATAGAAGACTTGT  
 TTTCTTCACTTAAACATATCCAACATACTTTGGTAGATTCTCAGAGCCAGGAGGATATTTCACTGCTTTT  
 ACAACTTGTTCAAATAAGGATTTCCAGAATGCATTTAAGATACACAATGCCATCACAGTACACATGAAC  
 AAGGCCAGTCTCCATTTCTCTTATCTCCAACGCACAAGATCTTGCTCAAGAGGTACAACTGTTTTGA  
 AGCCAGTTCATCATAAGGAAGGACAAGAACTAACTGCTTTGCTGAATACTCCACATATTCAGGCACCTTT  
 ACTGGCCACGATAAGGTTGCTGAGCAGGAAATGCAGCTAGAGCCATTACAGATGAGAGAGTTTATGAA  
 AGTATTGGCCAGTATGGAGGAGAACTGTAAAAATAGTTCGTATAGAAAAGGCTCGTGATATTCCTGTTGG  
 GTGCTACAGTTCGTAATGAAATGGACTCTGTCATCATTAGCCGGATAGTAAAAGGGGGTGTGCAGAGAA  
 AAGTGGTCTGTTGCATGAAGGAGATGAAGTTCTAGAGATTAATGGCATTGAAATTCGGGGGAAAGATGTC  
 AATGAGTTTTTTGACTTGTGTCTGATATGCATGGTACTTTGACTTTTGTCTGATTCCCAGTCAACAGA  
 TCAAGCCGCTCTGCCAAGGAAACAGTAAATCCATGTAAGGCTCATTTTGACTATGACCCTCAGATGA  
 CCCTTATGTTCCATGTCGAGAGTTAGGTCTGTCTTTTCAAAGGTGATATACTTCATGTGATCAGTCAA  
 GAAGATCCAACTGGTGGCAGGCCTACAGGAAGGGGACGAAGATAATCAACCTCTAGCCGGGCTTGTTT  
 CAGGGAAAAGCTTTCAGCAGCAAAGGGAAGCCATGAAACAAACCATAGAAGAAGATAAGGAGCCAGAAAA  
 ATCAGGAAAAGCTGGTGTGCAAAGAAGAATAAAAAGAAGAGGAAAAAGGTTTTATATAATGCCAATAAA  
 AATGATGATTATGACAACGAGGAGATCTTAACCTATGAGGAAATGTCACTTTATCATCAGCCAGCAAATA  
 GGAAGAGACCTATCATCTTGATTGGTCCACAGAACTGTGGCCAGAATGAATTGCGTCAGAGGCTCATGAA  
 CAAAGAAAAGGACCGCTTTGCATCTGCAGTTCCTCATAACCCGGAGTAGGCGAGACCAAGAAGTAGCC  
 GGTAGAGATTACCACTTTGTTTCGCGGCAAGCATTGAGGCAGACATAGCAGCTGGAAGTTCATTGAGC  
 ATGGTGAATTTGAGAAGAATTTGTATGGAAGTACATAGATTCTGTACGGCAAGTATCAACTCTGGCAA  
 AATATGTCTTTAAGTCTTCGTACACAGTCATTGAAGACTCTCCGGAATTCAGATTTGAAACCATATATT  
 ATCTTCATTGCACCCCTTCAACAAGAAAGACTTCGGGCATTATTGGCCAAAGAAGCAAGAATCCAAGC  
 CTGAAGAGTTGAGAGAAATCATTGAGAAGACAAGAGAGATGGAGCAGAACAATGGCCACTACTTTGATAC  
 GGCAATTTGTAATTCGATCTTGATAAAGCCTATCAGGAATTGCTTAGGTTAATTAACAACTTGATACT  
 GAACCTCAGTGGGTACCATCCACTTGGCTGAGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC234635 representing NM\_001256550  
Red=Cloning site Green=Tags(s)

MAVDCPGDLGTRMMPIRRSAQLERIRQQQEDMRRRREEEGKKQELDLNSSMRLKLAQIPPKTGIDNPMF  
 DTEEGIVLESPHYAVKILEIEDLFSSLKHIQHTLVDSQSQEDISLLLQLVQNKDFQNAFKIHNAITVHMN  
 KASPPFPLISNAQDLAQEVQTVLKPVHHKEGQELTALLNTPHIQALLLAHDKVAEQEMQLEPITDERVYE  
 SIGQYGGGETVKIVRIEKARDIPLGATVRNEMDSVVISRIVKGGAAEKSGLLHEGDEVLEINGIEIRGKDV  
 NEVFDLLSDMHGTLTFVLIPSQQIKPPAKETVIHVKAHFDYDPSDDPYVPCRELGLSFQKGDILHVISQ  
 EDPNWWQAYREGDEDNQLAGLVPKSFQQQREAMKQTI EEDKEPEKSGKLWCAKKNKKRKKVLYNANK  
 NDDYDNEEILT YEEMSLYHQPANRKRPIILIGPQNCQNELRQRLMNKEKDRFASAVPHTTRSRRDQEVA  
 GRDYHFVSRQAFEADIAAGK FIEHGFEKNLYGTSIDSVRQVINSKGICLLSLRTQSLKTLRNSDLKPYI  
 IFIAPPSQERLRALLAKEGKNPKPEELREIIEKTREMEQNNGHYFDTAIVNSDLDKAYQELLRLINKLDT  
 EPQWVPSTWLR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001256550

**ORF Size:** 1923 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\\_001256550.2](#)

**RefSeq Size:** 5376 bp

**RefSeq ORF:** 1926 bp

**Locus ID:** 64398

**UniProt ID:** [Q8N3R9](#)

**Cytogenetics:** 14q23.3

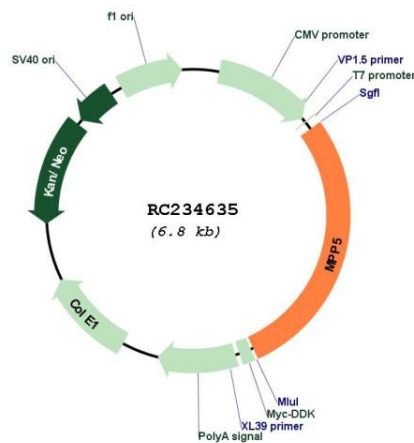
**Protein Families:** Druggable Genome

**Protein Pathways:** Tight junction

**MW:** 73.9 kDa

**Gene Summary:** This gene encodes a member of the p55-like subfamily of the membrane-associated guanylate kinase (MAGUK) gene superfamily. The encoded protein participates in the polarization of differentiating cells, has been shown to regulate myelinating Schwann cells (PMID: 20237282), and is one of the components of the Crumbs complex in the retina. Mice which express lower levels of the orthologous protein have retinal degeneration and impaired vision (PMID: 22114289). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2012]

### Product images:



Circular map for RC234635