

Product datasheet for **RG234635**

MPP5 (NM_001256550) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MPP5 (NM_001256550) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MPP5
Synonyms:	PALS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG234635 representing NM_001256550
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCTGTTGACTGCCCTGGAGATTTGGGCACCAGGATGATGCCAATACGTCGAAGTGCACAGTTGGAGC
 GTATTCGGCAACAACAGGAGGACATGAGGCGTAGGAGAGAGGAAGAAGGGAAAAAGCAAGAACTTGACCT
 TAATTCCTCCATGAGACTTAAGAAACTAGCCAAATTCCTCCAAAGACCGGAATAGATAACCCTATGTTT
 GATACAGAGGAAGGAATTGTCTTAGAAAGTCTCATTATGCTGTGAAAATATTAGAAATAGAAGACTTGT
 TTTCTTCACTTAAACATATCCAACATACTTTGGTAGATTCTCAGAGCCAGGAGGATATTTCACTGCTTTT
 ACAACTTGTTCAAAATAAGGATTTCCAGAATGCATTTAAGATACACAATGCCATCACAGTACACATGAAC
 AAGGCCAGTCTCCATTTCTCTATCTCCAACGCACAAGATCTTGCTCAAGAGGTACAAACTGTTTTGA
 AGCCAGTTCATCATAAGGAAGGACAAGAACTAACTGCTTTGCTGAATACTCCACATATTCAGGCACCTTT
 ACTGGCCACGATAAGGTTGCTGAGCAGGAAATGCAGCTAGAGCCATTACAGATGAGAGAGTTTATGAA
 AGTATTGGCCAGTATGGAGGAGAACTGTAAAAATAGTTCGTATAGAAAAGGCTCGTGATATTCCTGTTG
 GTGCTACAGTTCGTAATGAAATGGACTCTGTCATCATTAGCCGGATAGTAAAAGGGGGTGTGCAGAGAA
 AAGTGGTCTGTTGCATGAAGGAGATGAAGTTCTAGAGATTAATGGCATTGAAATTCGGGGGAAAGATGTC
 AATGAGGTTTTGACTTGTGTCTGATATGCATGGTACTTTGACTTTTGTCTGATTCCCAGTCAACAGA
 TCAAGCCGCTCTGCCAAGGAAACAGTAAATCCATGTAAGGCTCATTTTGACTATGACCCTCAGATGA
 CCCTTAGTTCATGTCGAGAGTTAGGTCTGTCTTTCAAAAAGGTGATACTTTCATGTGATCAGTCAA
 GAAGTCCAACTGGTGGCAGGCCTACAGGGAAGGGACGAAGATAATCAACCTTAGCCGGCTTGTTTC
 CAGGGAAAAGCTTTCAGCAGCAAAGGGAAGCCATGAAACAAACCATAGAAGAAGATAAGGAGCCAGAAA
 ATCAGGAAAAGTGTGGTGTGCAAAGAAGAATAAAAAGAAGAGGAAAAAGGTTTTATATAATGCCAATAAA
 AATGATGATTATGACAACGAGGAGATCTTAACCTATGAGGAAATGCACTTTATCATCAGCCAGCAATA
 GGAAGAGACCTATCATCTTGATTGGTCCACAGAACTGTGGCCAGAATGAATTGCGTCAGAGGCTCATGAA
 CAAAGAAAAGGACCGCTTTGCATCTGCAGTTCCTCATAACAACCCGGAGTAGGCGAGACCAAGAAGTAGCC
 GGTAGAGATTACCACTTTGTTTCGCGGCAAGCATTGAGGCAGACATAGCAGCTGGAAAGTTCATTGAGC
 ATGGTGAATTTGAGAAGAATTTGTATGGAAGTACATAGATTCTGTACGGCAAGTATCAACTCTGGCAA
 AATATGTCTTTAAGTCTTCGTACACAGTCAATGAAGACTCTCCGGAATTCAGATTTGAAACCATATATT
 ATCTTCATTGCACCCCTTCAACAAGAAAGACTTCGGGCATTATTGGCCAAAGAAGCAAGAAATCCAAGC
 CTGAAGAGTTGAGAGAAATCATTGAGAAGACAAGAGAGATGGAGCAGAACAATGGCCACTACTTTGATAC
 GGCAATTTGTAATTCGATCTTGATAAAGCCTATCAGGAATTGCTTAGGTTAATTAACAACTTGATACT
 GAACCTCAGTGGGTACCATCCACTTGGCTGAGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG234635 representing NM_001256550
 Red=Cloning site Green=Tags(s)

MAVDCPGDLGTRMMPIRRSAQLERIRQQQEDMRRRREEEGKKQELDLNSSMRLKLAQIPPKTGIDNPMF
 DTEEGIVLES PHYAVKILEIEDLFSSLKHIQHTLVDSQSQEDISLLLQLVQNKDFQNAFKIHNAITVHMN
 KASPPFPLISNAQDLAQEVQTVLKPVHHKEGQELTALLNTPHIQALLLAHDKVAEQEMQLEPITDERVYE
 SIGQYGGETVKIVRIEKARDIPLGATVRNEMDSVVISRIVKGGAAEKSGLLHEGDEVLEINGIEIRGKDV
 NEVFDLLSDMHGTLTFVLIPSQQIKPPPAKETVIHVKAHFDYDPSDDPYVPCRELGLSFQKGDILHVISQ
 EDPNWWQAYREGDEDNQLAGLVPGKSFQQQREAMKQTI EEDKEPEKSGKLWCAKKNKKRKKVLYNANK
 NDDYDNEEILTYEEMSLYHQPANRKRPIILIGPQNCGQNELRQRLMNKEKDRFASAVPHTRRRDQEVA
 GRDYHFVSRQAFEADIAAGKFIIEHGEFEKNLYGTSIDSVRQVINSKICLLSLRTQSLKTLRNSDLKPYI
 IFIAPPSQERLRALLAKEGKNPKPEELREIIIEKTREMEQNNGHYFDTAIVNSDLKAYQELLRLINKLDT
 EPQWVPSTWLR

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



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](#)

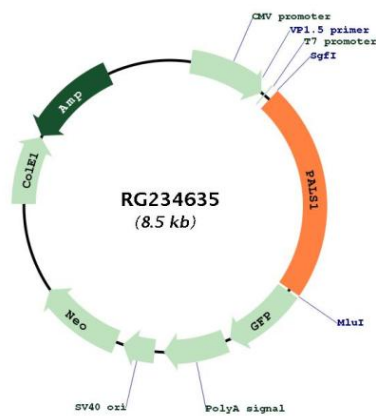
Cytogenetics: 14q23.3

Protein Families: Druggable Genome

Protein Pathways: Tight junction

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 RG234635