

Product datasheet for **SC112491**

MPP5 (NM_022474) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MPP5 (NM_022474) Human Untagged Clone
Tag:	Tag Free
Symbol:	MPP5
Synonyms:	PALS1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_022474, the custom clone sequence may differ by one or more nucleotides

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ATGACAACATCCCATATGAATGGGCATGTTACAGAGGAATCAGACAGCGAAGTAAAAATGTTGATCTTG
CATCACCAGAGGAACATCAGAAGCACCGAGAGATGGCTGTTGACTGCCCTGGAGATTTGGCACCAGGAT
GATGCCAATACGTGCGAAGTGCACAGTTGGAGCGTATTCGCAACAACAGGAGGACATGAGGCGTAGGAGA
GAGGAAGAAGGGAAAAAGCAAGAAGTACCTTAATTCTCCATGAGACTTAAGAACTAGCCCAAATTC
CTCCAAAGACCGGAATAGATAACCCTATGTTTGATACAGAGGAAGGAATTGTCTTAGAAAGTCTCATT
TGCTGTGAAAATATTAGAAATAGAAGACTTGTTTTCTTCACTTAAACATATCCAACATACTTTGGTAGAT
TCTCAGAGCCAGGAGGATATTTCACTGCTTTTACAACCTGTTCAAATAAGGATTTCCAGAATGCATTTA
AGATACACAATGCCATCACAGTACACATGAACAAGGCCAGTCTCCATTTCTCTTATCTCCAACGCACA
AGATCTTGCTCAAGAGGTACAACTGTTTTGAAGCCAGTTCATCATAAGGAAGGACAAGAAGTAACTGCT
TTGCTGAATACTCCACATATTCAGGCATTTTACTGGCCACGATAAGGTTGCTGAGCAGGAAATGCAGC
TAGAGCCATTACAGATGAGAGAGTTTATGAAAGTATTGGCCAGTATGGAGGAGAACTGTAAAAATAGT
TCGTATAGAAAAGGCTCGTGATATTCGGTTGGGTGCTACAGTTTCGTAATGAAATGGACTCTGTCATCATT
AGCCGGATAGTAAAAGGGGGTGCTGCAGAGAAAAGTGGTCTGTTGCATGAAGGAGATGAAGTTCTAGAGA
TTAATGGCATTGAAATTCGGGGGAAAGATGTCAATGAGGTTTTTGACTTGTGTCTGATATGCATGGTAC
TTTGACTTTTTGCTGCTGATTTCCAGTCAACAGATCAAGCCGCTCTGCCAAGGAAACAGTAAATCCATGTA
AAAGCTCATTTTGACTATGACCCCTCAGATGACCCCTATGTTCCATGTCGAGAGTTAGGTCTGCTTTTT
AAAAAGGTGATACTTCATGTGATCAGTCAAGAAGATCCAACTGGTGGCAGGCCTACAGGGAAGGGGA
CGAAGATAATCAACCTTAGCCGGGCTTGTTCCAGGAAAAGCTTTCAGCAGCAAAGGGAAGCCATGAAA
CAAACCATAGAAGAAGATAAGGAGCCAGAAAAATCAGGAAAAGTGGTGTGCAAAGAAGAAATAAAAA
AGAGGAAAAAGGTTTTATATAATGCCAATAAAAAATGATGATTATGACAACGAGGAGATCTTAACCTATGA
GGAAATGTCACCTTATCATCAGCCAGCAAAATAGGAAGAGACCTATCATCTTGATTGGTCCACAGAACTGT
GGCCAGAATGAATTGCGTCAGAGGCTCATGAACAAAAGAAAAGGACCGCTTTCATCTGCAGTTCTCATA
CAACCCGGAGTAGGCGAGACCAAGAAGTAGCCGGTAGAGATTACCACTTTGTTTCGCGGCAAGCATTGGA
GGCAGACATAGCAGCTGGAAAGTTTATTGAGCATGGTGAATTTGAGAAGAATTTGTATGAACTAGCATA
GATTCTGTACGGCAAGTATCACTCTGGCAAAATATGTCTTTAAGTCTTCGTACACAGTCATTGAAGA
CTCTCCGGAATTCAGATTTGAAACCATATATTATCTTATTGCACCCCTTCAACAAGAAAGACTTCGGGC
ATTATTGGCAAAGAAGGCAAGAATCCAAGCCTGAAGAGTTGAGAGAAATCATTGAGAAGACAAGAGAG
ATGGAGCAGAACAATGGCCACTACTTTGATACGGCAATTTGTAATTCCGATCTTGATAAAGCCTATCAGG
AATTGCTTAGGTTAATTAACAACTTGATACTGAACCTCAGTGGGTACCATCCACTTGGCTGAGGTGA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_022474 unedited

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GTTCACATTTGTATACGACTCATATAGGGCGGCCGCAATTCGCACGAGGGANAGNAGGA
AGNAAGGGAAAAAGCAAAAAGTACCTTAATTCTCCATGAGACTTAAGAACTAGCCC
AAATTCCTCCAAAGACCGGAATAGATAACCCTATGTTTGATACAGAGGAAGGAATTGCT
TAGAAAGTCTCATTATGCTGTGAAAATATTAGAAATAGAAGACTTGTTTTCTTCACTTA
AACATATCCAACATACTTTGGTAGATTCTCAGAGCCAGGAGGATATTTCACTGCTTTTAC
AACTTGTTCAAAAATAAGGATTTCCAGAATGCATTTAAGATACACAATGCCATCACAGTAC
ACATGAACAAGGCCAGTCTCCATTTCTCTTATCTCCAACGCACAAGATCTTGCTCAAG
AGGTACAAACTGTTTTGAAGCCAGTTCATCATAAGGAAGGACAAGAAGTAACTGCTTTGC
TGAATACTCCACATATTCAGGCATTTTACTGGCCACGATAAGGTTGCTGAGCAGGAAA
TGCAGCTAGAGCCATTACAGATGAGAGAGTTTATGAAAGTATTGGCCAGTATGGAGGAG
AACTGTAAAAATAGTTCGTATAGAAAAGGCTCGTGATATTCGGTTGGGTGCTACAGTTC
GTAATGAAATGGACTCTGTATCATTAGCCGGATAGTCAAAGGGGGTGCTGCAGAGAAAA
GTGGTCTGTTGCATGAAGGAGATGAAGTTCTAGAGATTAATGGCATTGAAATTCGNGGA
AAGATGTCAATGAGGTTTTTACTGTTGNTGTCTGATATGCATGGTACTTTGACTTTTGTC
TGATTCCAGTCAACAGATCAAGCCGNCNTGCCAGGNAACAGTAAATCCATGTANAAGC
TCATTNTGACTATGACCCCTCAGAGACCCTT
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_022474 unedited NNNNTTTTACTATGNACCCGCGCCGCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTTT ATATTCATCAACAGAATTCCAGTTTATTACCTATATACGTAGCACAGTCATAGGATAC TGTGCTCATACATAAAAAATGCAAAAAGTCAAATGTGCTATCCTCCCATGTATACAAAA AACTATTAGCATCATGAGGAAGAACTTTTTAACAGTCAATACAGATTATAATGAACACC TGCCATTACATAAAAAATGTAACATACATTCTATTATACTATGCTGATGAGGGAAGGGAAGC TAAGTGAGTAAATCAGTTGAGACGACTTAAGAAAAAATTCAGGAAATCATAATTTAAAA AAGATCAGCATATTTTGTATACCTTTAAGTAGATTAGAGTGTGTTGAGTGTAGAGTCTGA TCCACAAAGTTTGTAGCAAAAAAAGTGGTCTTCTAATGGAATGTTTTTTGTTTTTTAAG AATCAAAAGACATATAAATGAATTCAAGCCTAACAAAAGTAGCTTCAACCCAAAGTGGCAC CATTTTGTTTTTATTTTCTTTTTAGGAAAGTATCTCTGACTACATTAGTTTCT AAGCAAATACTGCCTTGCCAGTGCATAGAAGCACAGTCCCTCTGCTCAATATCCCAAT GAAGTCATTTAAGTGTTAATGATTTAACACTTAAGAATAATCACATCAATATTTNGTGTG AGACATGGACGCTTGTGTATACAAGTTTTTACAGAGATAACAATAAGCAGAAAGGTTT AAGTGAAAACAAAAGTTTTTACCAGGAAAATGGATGCTTGTGTAAGCTTTCATTTA GAATCCCANATGAGGCAAGAACCCTAAAGCCTGTATAGAAAAAAGAATGCCATGCCN
Restriction Sites:	NotI-NotI
ACCN:	NM_022474
Insert Size:	2820 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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:	<u>NM_022474.1, NP_071919.1</u>
RefSeq Size:	5608 bp
RefSeq ORF:	1512 bp
Locus ID:	64398
UniProt ID:	<u>Q8N3R9</u>
Cytogenetics:	14q23.3
Domains:	SH3, PDZ, L27, Guanylate_kin, GuKc
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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer protein (isoform 1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.