

Product datasheet for **MC221825**

Ppp1r9b (NM_172261) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ppp1r9b (NM_172261) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ppp1r9b
Synonyms:	SPL; Spn
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221825 representing NM_172261
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGAAGACGGAGCCTCGGGGGCCGGGGTCCCTCCGGAGCGCCTCCCGCACCGCAGCGCCTACG
 AAGCGGGCATCCAGGCACTAAAGCCTCCCGATGCACCCGGGCCGACGAGGCACCCAAGCGGCCACCA
 TAAGAAATATGGCTCCAACGTCCACCGCATCAAAAGTATGTTCTGCAGATGGGACACCGCGGGGCCG
 CCGGGTGAAGCAGGCGGAGGCGCAGGCATGGCCGAGGCCACCGGGCGTCCGATCGCGGGGTGCGCTGT
 CCCTGCCCGGGCCAGCAGCCTGAACGAGAAGTACAGCACAGTCCCTGCTCAAGCTGGCACCAGTGT
 GTCGGAGCGGTGAGCCGCTCGACTCCAAGCCCGCGCCCTCGGCGCAGCCCGCTCTCCGCCGACCCG
 CCGTCCCCTGCAGGAGACGCGAAGCTGTTGAAACGGAGCGTCCCGCGGCCCTCGGGTGGCGACAAGG
 AGGCCGTGGCGCGCGGCTGCTGAGGCAGGAGCGCGCCGGCTGCAGGACCGGAAGCTGGACGTCGTGGT
 GCGCTTTAACGGCAGCACCGAGGCGCTGGACAAGCTGGATGCTGACGCCGTGTCGCCGACGGTCAGCCAG
 CTACAGTGGGTCTTCGAGAAAGCCGACTCGAGGACCGGCCCTCACCGTGACCCCGCCCCCTCGGGCAG
 CCGGGGCGCCCAAGTCAACTCGAAGCTGGTCACTAAGCGGTCCCGGGTGTTCAGCCACCGCCCGCCG
 TCCCGCCCGTCCGGGGATGGCGCGACCGAGAAGGAGCGTGGCCCGGAGGGCAGCAGCCCCACAGCAC
 CGGGTGGCCCTGCCCGACTCCGCCTAAGCCCGGGAGGTGCGCAAGATCAAGCCGGTGGAGGTTGAAG
 AAAGTGGGAGTCTGAGGCCGAGTCGGCTCCCGGGGAAGTGATCCAGGCCGAGGTGACGGTCCATGCAGC
 CTTGGAGAATGGCAGCACCCCGCCACCACAGCCAGCCCTGCACCCGAGGAACCAAGGCCGAAGCGGT
 CCCGAGGAGGCGCGCGCTCAGTGGCAGCGCTAGAGAGGGGGTGGACAATGGCCGGCCCGGACA
 TGGCACCTGAGGAGGTGGATGAATCCAAGAAGGAGGACTTCTCGAAGCGGACTTGGTGGATGTGAGCGC
 CTACAGTGGACTCGGGGAGGACTCTGGGGCAGTGCCTTGAGGAGGACGATGAAGAAGACGAAGAGGAC
 GGGGAGCCCCCTATGAGCCGGAGTCAGGGTGTGTGGAGATTCCCGGGCTCTCAGAGGAAGAGGCCGG
 CCCCAGCCGGAAGATCCATTTACGACCCGACCGATCCAAGTATTACAGCACCTACTCCAACGAGGACTA
 TGACCGACGCAATGAGGATGTGGATCCCATGGCAGCCTCTGCGGAATATGAGCTAGAGAAGCGAGTGGAG
 AGGTTGGAGCTGTTTCTGTGGAGCTGGAGAAGGACTCTGAGGGCTTGGGCATCAGCATATTGGCATGG
 GCGCCGGAGCCGACATGGCCTGGAGAAGCTGGGCATCTTCGTAAGACTGTGACTGAGGGTGGTGCAGC
 CCATCGGGATGGCAGGATCCAAGTGAACGACCTGCTGGTGGAGGTGGATGGGACGAGCCTGGTGGGAGT
 ACCCAGAGCTTTGCAGCCTCTGTACTTAGGAACACCAAGGCCGAGTGGGTTTCATGATTGGCCGGGAGC
 GGCTGGAGAACAGAGTGAAGTGGCCAGCTAATTCAGCAGACCTTGAGCAGGAGCGATGGCAGCGGGA
 GATGATGGAGCAGAGATACGCCAGTATGGAGAGGATGATGAGGAGACAGGAGATATGCCACCGACGAA
 GATGAAGAAGTGAAGCCAACTCCAGGGGGTGAATGGCCATTGAGGTGTTTGAAGTACGAGAGAAGC
 AGGATGCGCTGTCCCGGTGGAGATGGAGCCCGAAAAGCTGGTGCACAAGTTCAAGGAGCTCCAGATCAA
 GCATGCTGTCACTGAAGCGGAAATCCAGCAGCTGAAACGGAAGTTGCAGAGTCTGGAGCAGGAGAAAGGG
 CGCTGGCGGGTAGAGAAGGCCAGCTGGAGCAGAGCGTGGAGGAGAATAAGGAGCCGATGGAGAAGCTAG
 AGGGCTACTGGGTGAGGCCAGAGCCTGTGCCAGGCTGTGGATGAGCACCTGCGGGAGACCCAGGCCCA
 GTATCAGGCCCTGGAGCGCAAGTACAGCAAGGCCAAGCGTCTCATCAAGGACTACCAGAAAAGGAGATC
 GAGTTCTGAAAAAAGAGACAGCCAGCGTCGGGTACTGGAAGAGTCGGAGCTAGCCAGGAAGGAGGAAA
 TGGACAACTTCTGGACAAGATCTCAGAACTGGAAGGAACTGCAGACACTGAGGAACTCCAATTCTAC
 TTA

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
 ACCN: NM_172261
 Insert Size: 2454 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:	NM_172261.3 , NP_758465.2
RefSeq Size:	4345 bp
RefSeq ORF:	2454 bp
Locus ID:	217124
UniProt ID:	Q6R891
Cytogenetics:	11 D
Gene Summary:	Seems to act as a scaffold protein in multiple signaling pathways. Modulates excitatory synaptic transmission and dendritic spine morphology. Binds to actin filaments (F-actin) and shows cross-linking activity. Binds along the sides of the F-actin. May play an important role in linking the actin cytoskeleton to the plasma membrane at the synaptic junction. Believed to target protein phosphatase 1/PP1 to dendritic spines, which are rich in F-actin, and regulates its specificity toward ion channels and other substrates, such as AMPA-type and NMDA-type glutamate receptors. Plays a role in regulation of G-protein coupled receptor signaling, including dopamine D2 receptors and alpha-adrenergic receptors. May establish a signaling complex for dopaminergic neurotransmission through D2 receptors by linking receptors downstream signaling molecules and the actin cytoskeleton. Binds to ADRA1B and RGS2 and mediates regulation of ADRA1B signaling. May confer to Rac signaling specificity by binding to both, RacGEFs and Rac effector proteins. Probably regulates p70 S6 kinase activity by forming a complex with TIAM1. Required for hepatocyte growth factor (HGF)-induced cell migration (By similarity).[UniProtKB/Swiss-Prot Function]