

Product datasheet for **MR222264**

Ppp1r9b (NM_172261) Mouse Tagged ORF Clone

Product data:

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



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**ORF Nucleotide
Sequence:**

>MR222264 representing NM_172261
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGATGAAGACGGAGCCTCGGGGGCCCGGGGTCCCTCCGGAGCGCCTCCCGCACCGCAGCGCCTACG
 AAGCGGGCATCCAGGCACTAAAGCCTCCCGATGCACCCGGGCCCGACGAGGCACCAAGCGGGCCACCA
 TAAGAAATATGGCTCCAACGTCCACGCATCAAAAGTATGTTCTGCAGATGGGACACACCGGGGCCG
 CCGGGTGAGGCAGGCGGAGGCGCAGGCATGGCCGAGGCCACCGGCGTCCGATCGCGGGGTGCGCCTGT
 CCCTGCCCGGGCCAGCAGCCTGAACGAGAAGCTAGACCACAGTGCCCTGCTCAAGCTGGCACCAGTGT
 GTCGGAGCGCTGAGCCGCTTCGACTCCAAGCCCGCGCCCTCGGCGCAGCCGCTCTCCGCCGACCCG
 CCGTCCCGGTGCAGGAGACGCGGAAGCTGTTCAACGGAGCGTCCCGCGGCTCGGGTGGCGACAAGG
 AGGCCGTGGCGCGCGGCTGCTGAGGCAGGAGCGCGCCGCTGCAGGACCGGAAGCTGGACGTCGTGGT
 GCGCTTTAACGGCAGCACCGAGGCGCTGGACAAGCTGGATGCTGACGCCGTGTCGCCGACGGTCAGCCAG
 CTACAGTCGGTCTTCGAGAAAGCCGACTCGAGGACCGGCCCTCACCGTGACCCGGCCCCCTCGGGCAG
 CCGGGGCGCCCCAGGTCAACTCGAAGCTGGTACTAAGCGGTCCCGGGTGTTCAGCCACCGCCGCCGCC
 TCCCGCCCCGTCGGGGATGGCGCGACCGAGAAGGAGCGTGGCCCCGAGGGCAGCAGCCCCACAGCAC
 CGGGTGGCCCCCTGCCCGACCTCCGCCTAAGCCCGGGAGGTGCGCAAGATCAAGCCGGTGGAGGTTGAAG
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 CTTGGAGAATGGCAGCACCCGGCCACCACAGCCAGCCCTGCACCCGAGGAACCAAGGCCGAAGCGGT
 CCCGAGGAGGAGCGCGCGCTCAGTGGCAGCGCTAGAGAGGGGGTGGACAATGGCCGGCCCCGGACA
 TGGCACCTGAGGAGGTGGATGAATCCAAGAAGGAGGACTTCTCGAAGCGGACTTGGTGGATGTGAGCGC
 CTACAGTGGACTCGGGGAGGACTCTGGGGCAGTGCCCTGGAGGAGGACGATGAAGAAGACGAAGAGGAC
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 CCCCAGCCGGAAGATCCATTTAGCACCGCACCGATCCAAGTATTCAGCACCTACTCCAACGAGGACTA
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 AGGTTGGAGCTGTTTCTGTGGAGCTGGAGAAGGACTCTGAGGGCTTGGGCATCAGCATCATTGGCATGG
 GCGCCGGAGCCGACATGGGCCTGGAGAAGCTGGGCATCTTCGTAAGACTGTGACTGAGGGTGGTGCAGC
 CCATCGGGATGGCAGGATCCAAGTGAACGACCTGCTGGTGGAGGTGGATGGGACGAGCCTGGTGGGAGTG
 ACCCAGAGCTTTGCAGCCTCTGTACTTAGGAACACCAAGGCCGAGTGCGGTTTCATGATTGGCCGGGAGC
 GGCTGGAGAACAGAGTGAAGTGGCCAGCTAATTCAGCAGACCTTGGAGCAGGAGCGATGGCAGCGGGA
 GATGATGGAGCAGAGATACGCCAGTATGGAGAGGATGATGAGGAGACAGGAGAGTATGCCACCGACGAA
 GATGAAGAACTGAGCCCAACGTTCCAGGGGGTGAATGGCCATTGAGGTGTTTGAAGTACGAGAGAAGC
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 GCATGCTGTCACTGAAGCGGAAATCCAGCAGCTGAAACGGAAGTTGCAGAGTCTGGAGCAGGAGAAAGGG
 CGCTGGCGGGTAGAGAAGGCCAGCTGGAGCAGAGCGTGGAGGAGAATAAGGAGCGGATGGAGAAGCTAG
 AGGGCTACTGGGTGAGGCCAGAGCCTGTGCCAGGCTGTGGATGAGCACCTGCGGGAGACCCAGGCCCA
 GTATCAGGCCCTGGAGCGCAAGTACAGCAAGGCCAAGCGTCTCATCAAGGACTACCAGCAAAAGGAGATC
 GAGTTCTGAAAAAAGACAGCCAGCGTCGGTACTGGAAGAGTCGGAGCTAGCCAGGAAGGAGGAAA
 TGGACAACTTCTGGACAAGATCTCAGAACTGGAAGAACTGCAGACACTGAGGAACTCCAATTCTAC
 T

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222264 representing NM_172261
 Red=Cloning site Green=Tags(s)

MMKTEPRGGPLRSASPHRSAYEAGIQALKPPDAPGPDEAPKAAHHKKYGSNVHRIKSMFLQMGTTAGP
 PGEAGGGAGMAEAPRASDRGVRLSLPRASSLNENVDSALLKLGTSSVSERVSFRDSKPAPSAQPAPPPHP
 PSRLQETRKL FERSVPAASGGDKEAVARRLLRQERAGLQDRKLDVVVRFNGSTEALDKLDADAVSPTVSQ
 LSAVFEKADSRTGLHRAPGPPRAAGAPQVNSKL VTKRSRVFQPPPPPPAPSGDGATEKERGGGQPPQH
 RVAPARPPPKPREVRKIKPVEVEESGESEASAPGEVIQAEVTVHAALENGSTPATTASPAPEEPKAEAV
 PEEEEAAASVATLERGVNDGRAPDMAPEEVDESKKEDFSEADLVDSAYSGLGEDSGGSALEEDDEEDEED
 GEPPYEPESGCVEIPGLSEEEDPAPSRKIHFSTAPIQVFSTYSNEDYDRRNEDVDPMAASAEYELEKRV
 RLELFPVELEKDSEGLGISIIGMGAGADMGLEKLGI FVKTVTEGGAAHRDGRIQVNDLLVEVDGTSLVGV
 TQSFAASVLRNTKGRVRFMIGRERPGEQSEVAQLIQQTLEQERWQREMMEQRYAQYGEDDEETGEYATDE
 DEELSPTFPGGEMAEVFELEAENEDALSPVEMEPEKL VHKFKELQIKHAVTEAEIQQLKRKLQSLEQEK
 RWRVEKAQLEQSVENKERMEKLEGYWGEAQLCQAVDEHLRETQAQYQALERKYSKAKRLIKDYQQKEI
 EFLKKETAQRRVLEESELARKEEMDKLLDKISELEGNLQTLRNSNST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9040_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172261

ORF Size: 2451 bp

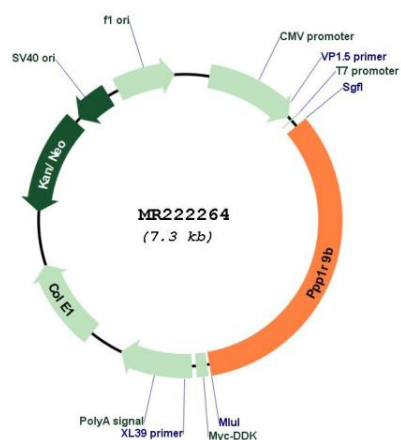
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_172261.3, NP_758465.2</u>
RefSeq Size:	4345 bp
RefSeq ORF:	2454 bp
Locus ID:	217124
UniProt ID:	<u>Q6R891</u>
Cytogenetics:	11 D
MW:	90 kDa
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]

Product images:



Circular map for MR222264