

## Product datasheet for **RR204947**

### Prrt1 (NM\_001032285) Rat Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Prrt1 (NM\_001032285) Rat Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Prrt1  
 Synonyms: DSPD1; Ng5; Orf31  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RR204947 representing NM\_001032285  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTCGTCAGAAAAGTCAGGCCTTCCAGACTCGGTTCCACACTTCACCTCCGCCCTACAATGCCCCCC  
 AACCTCCAGCCGAGCCCCCATCCCTCCCCACAAACCGCTCCATCCTCATCATCACCACCACCA  
 CTACCACCAGTCTGGCACTGCCACCCTCCCGCCTTAGGAGCAGGTGGCCTGGCCTCTGCTGCGGTGGC  
 GCTCAACGTGGTCTTCTGCTCTGCCACGCTACCGCGGCCCCCCACCATGCCCTCCCGTCCCGCTG  
 CTGGGGTCCCCACCCGGCTGTGCTACCTACCCGCATGCCACCCGACCTTATCTGCAGGAGACTCG  
 TTCGAGGGTCCACTTCCCCACCACCGCTGCGGCCGCCGCCACCACCAGCGCCTGCCCGACG  
 GCCAAGCCCCAGGCTTCGTGGTGGCCACGCACGCGGGGGCGGTGGGCACGTTGCCGCTGGGGGGTACG  
 TGGCTCCGGGCTACCCGCTGCAGCTGCAGCCGTGCACCGCTTATGTCGGTGTATCCGGTGGGCACGCC  
 CTACGCAAGCGGGACCCCGGGGTCCAGGAGTGACCTCCACTCTGCCCCGCCGCCAGGGCCAGGG  
 TTGGCTCTGTTGGAGCCAGGCGCCCGCATGACTACATGCCATCGCTGTGCTGACCACCATCTGCT  
 GCTTCTGGCCACAGGCATCATCGCCATTTCAAGCCGTGCAGGTGCGCACGGCCTTGGCCCGGAGA  
 CTTGGTGTCCCGGAGATCGCTTCGCGCAGGCCCGGAATTTCTCTTTCATCTCCCTGGCCGTGGGCATC  
 GCAGCTATGGTGCTTTGTACCATCTCACTGTAGTCATCATCATTGCCGCCAGCACCAAAACTACT  
 GGGATCCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR204947 representing NM\_001032285  
Red=Cloning site Green=Tags(s)

MSSEKSGLPDSVPHTSPPPYNAPQPPAEPPIPPPQTAPSSHHHHHHHHYHQSQTATLPRLGAGGLASAAAG  
 AQRGPFSSATLPRPPHHAPPGPAAGAPPPGCATLPRMPPDPYLQETRFEGPLPPPPAAAAAPPPAPAPT  
 AQAPGFVVPHTAGAVGTLPLGGYVAPGYPLQLQPCTAYVPVYPVGTPTASGTPGGPGVTSTLPPPPQGGP  
 LALLEPRRPPHDYMPIAVLTTICCFWPTGIIAIFKAVQVRTALARGDLVSAEIASREARNFSFISLAVGI  
 AAMVLCITLTVVIIIAAQHHENYWDP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001032285

**ORF Size:** 918 bp

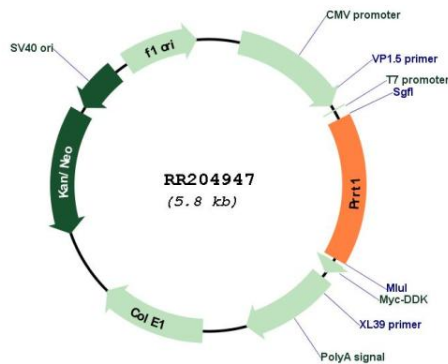
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u>NM_001032285.1, NP_001027456.1</u>
<b>RefSeq Size:</b>	1949 bp
<b>RefSeq ORF:</b>	921 bp
<b>Locus ID:</b>	406167
<b>UniProt ID:</b>	<u>Q6MG82</u>
<b>Cytogenetics:</b>	20p12
<b>MW:</b>	31.4 kDa
<b>Gene Summary:</b>	Required to maintain a pool of extrasynaptic AMPA-regulated glutamate receptors (AMPA) which is necessary for synapse development and function. Regulates basal AMPAR function and synaptic transmission during development but is dispensable at mature hippocampal synapses. Plays a role in regulating basal phosphorylation levels of glutamate receptor GRIA1 and promotes GRIA1 and GRIA2 cell surface expression.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RR204947