

## Product datasheet for RN207057

### Prr5 (NM\_001012121) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prr5 (NM_001012121) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Prr5
Synonyms:	Protor1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN207057 representing NM_001012121 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGACTCTCCGAGGTTGAAGTTCATGAGTTCGCCAGCCTCAGTGACCTGGGCAAGAGGGAGCCGG  
GCGCGGCGGGTGCAGACGAGCGGGGCACGCAGCAGCGCCGGCCCTGCGCAACGCCACCTGGAACAGTAT  
CCACAACGGTGTGATTGCCGTCTTTCAGCGCAAGGGGCTGCCGACCAAGAGCTTTCATCCTCAACGAG  
GGTGTCCGGCAGCTGCTGAAGACGGAGCTGGGGTCTTCTTCACTGAGTACCTGCAGAACCAGCTGCTGA  
CCAAGGGCATGGTGATTCTTCGTGACAAGATACGTTCTACGAGGGACAGAAGCTGCTGGACTACTGGC  
GGAGACCTGGGACTTCTTCTCAGTGATGTGCTGCCGACCTGCAGGCCATCTTTACCCCTGTGCAGGGC  
AAGGAGCCGTCGGTGCAGCAGCTTGCCCTGTTGCATTTCCGGAACACCATCACCCCTCAGCGTGAAGCTGG  
AGGACGCACTGGCCCGCTCCCACGCGTGTGTTCCCCCTGCCATCGCACAGATGCTGCTGGTACTGCAGGG  
AGTACATGAGTCCAGGGGTGACTGAAGATTACCTGCGCCTCGAGACATTGATCCAGAAGGTAGTGCA  
CCATACCTGGGCACCTATGGACTCTACTCCAATGAAGGGCCCTGTACCCATTCTGTATCCTTGAGAAAC  
GGTTCCTACGCCGCTCCCGCTCTGGGGATATCCTAGCCAAGAACCAGTGGTGCCTCCAAAAGCTACAA  
TACTCCCCTGCTCAATCCTGTGGCTGAGCATGAGGCAGAAGGCACAGCGTCCGGTGGCACAAGCATCCGC  
AGACACTCAGTCTCCGAGATGACATCTTGTCTGAGCCCAGGGCTTTGTGGACAGCCTGACCAGGGCC  
CTTCGGGGACCTTCAGGTCTTCCCATCACCCACTCAGGGCCTTGCCCCAGCAGACTATACCCCTGC  
CCATTCGCCCGAACAGGGCCAGACCATGGCTCCCCACCCACCTCCAGCCCTGAGACACTCGTGGACCAG  
ATCCTGGAGTCCGTGGACTCAGACTCCGAAGGGATATTATTGACTTTGGGCGGGGTAGTCGCTCCAGT  
TGTCTGACTTTGAGGCAGCAGGGCGGCCGAGTGTGTGA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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<b>Restriction Sites:</b>	Sgfl-RsrII
<b>ACCN:</b>	NM_001012121
<b>Insert Size:</b>	1164 bp
<b>OTI Disclaimer:</b>	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).
<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><a href="#">NM_001012121.1</a></u> , <u><a href="#">NP_001012121.1</a></u>
<b>RefSeq Size:</b>	1802 bp
<b>RefSeq ORF:</b>	1164 bp
<b>Locus ID:</b>	315189
<b>UniProt ID:</b>	<u><a href="#">Q5FVG6</a></u>
<b>Cytogenetics:</b>	7q34
<b>Gene Summary:</b>	<p>Subunit of mTORC2, which regulates cell growth and survival in response to hormonal signals. mTORC2 is activated by growth factors, but, in contrast to mTORC1, seems to be nutrient-insensitive. mTORC2 seems to function upstream of Rho GTPases to regulate the actin cytoskeleton, probably by activating one or more Rho-type guanine nucleotide exchange factors. mTORC2 promotes the serum-induced formation of stress-fibers or F-actin. mTORC2 plays a critical role in AKT1 'Ser-473' phosphorylation, which may facilitate the phosphorylation of the activation loop of AKT1 on 'Thr-308' by PDK1 which is a prerequisite for full activation. mTORC2 regulates the phosphorylation of SGK1 at 'Ser-421'. mTORC2 also modulates the phosphorylation of PRKCA on 'Ser-657'. PRR5 plays an important role in regulation of PDGFRB expression and in modulation of platelet-derived growth factor signaling. May act as a tumor suppressor in breast cancer (By similarity).[UniProtKB/Swiss-Prot Function]</p>