

Product datasheet for **MC200222**

Prpf19 (NM_134129) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prpf19 (NM_134129) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Prpf19
Synonyms:	AA617263; AL024362; D19Wsu55e; NMP200; Prp19; PSO4; Snev
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC004070 sequence for NM_134129
 CCCACGTGAAGCAGTTGTGCGAGCATCGCCACGCTGGGCAGCTGTCTACCCGCGTCCGAGCGCTCCGGAA
 GCTGCGGGGGACCGGAAGTGGCCCGCGGAGGCTGCAGAGAACCAGGAAACCTCTGTGAGGCGACTGGCAG
 CAGCGCTACGACGGCGCCATGTCCTGTATGCTGCTGATCTCCAATGAAGTGCCAGAGCACCCGTGCGTGT
 CCCCTGTCTAATCATGTGTATGAGCGGGACTCATTGAGAAGTACATTGCAGAGAATGGCACAGATCC
 TATCAACAACCAGCCTCTCTCAGAGGAGCAGCTCATCGACATCAAAGTTGCTCACCAATCCGACCCAAG
 CCTCCCTCCGCCACCAGCATCCCAGCCATTCTGAAAGCCTTGCAAGGATGAGTGGGATGCAGTCATGCTGC
 ACAGCTTCACTTTCGCCAGCAACTGCAGACAACCCGCCAGGAGCTGTCCCATGCTCTGTACCAACACGA
 TGCTGCCTGCCGAGTCATTGCCCGGCTACCAAGAGGTCAGTGTGCTCGAGAAGCTCTGGCTACTCTG
 AAACCACAGGCTGGGCTTATTGTACCTCAGGCTGTGCCAAGCTCACAGCCCAGTGTGTGGGTGCAGGAG
 AGCCCATGGATTTGGGTGAGCTGGTGGGAATGACCCCTGAGATTATCCAGAAGCTTCAAGACAAGGCTAC
 TGTGCTAACACAGAGCGTAAGAAGAGAGGAAAGACTGTCCCGAGGAGCTGGTGAACCTGAAGAGCTC
 AGCAAGTACCGGCAGGTGGCATCCCATGTGGGGCTACACAGTGTAGCATTCTGGGATTCTCGCTCTGG
 ACCTGTGTCCCTCAGACACCAACAAGATTCTACTGGTGGGCAGATAAAAATGTTGTTGCTTTTGATAA
 GAGTACTGAGCAAATATTGGCCACTCTCAAAGGCCATACCAAGAAGGTCACCAGTGTGGTGTTCATCCT
 TCTCAGGAACTGGTGTTCCTGCGTCCCTGATGCTACTATCAGGATTTGGTCAGTCCCGAACACTTCTCT
 GCGTACAGGTTGTTCCGGGCCATGAGAGTGCAGTGACAGGCCCTCAGCCTCCATGCTACTGGAGACTATCT
 CCTGAGCTCCTCTGATGATCAGTACTGGGCCTTCTCTGACATCCAGACAGGGCGTGTGCTACTAAGGTG
 ACAGATGAGACCTCCGGCTGCTCTTACCTGTGCACAGTTCCACCCTGATGGGCTCATCTTTGGAACAG
 GAACCATGGACTCCAGATCAAGATCTGGGACTTGAAGGAGCGTACCAATGTGGCCAACCTCCCTGGCCA
 CTCTGGCCCCATTACCAGCATCGCCTTCTGAGAATGGTACTACCTGGCCACAGCAGCTGATGATTCC
 TCAGTCAAGCTCTGGGACTTACGCAAGTTGAAGAACTTCAAGACATTGCAGCTGGACAACAACCTTTGAGG
 TGAAGTCACTAATCTTTGACCAGAGCGGTACCTACCTGGCGCTTGGGGGTACAGATGCCAGATCTACAT
 CTGCAAAACAATGGACAGAGATTCTTCACTTTACAGAGCACAGTGGCCTGACCACTGGAGTGGCCTTTGGA
 CACCATGCCAAGTTCATCGCTTCAACTGGCATGGACAGGAGCCTCAAATTCTACAGTCTGTAGGCCCTAT
 GCCTTCTCACAGTCTGGGCCTCATCTCAGTAGTGGGTTAGAGTTAGAGGGTGGGGGTGGGGGTGGGACT
 TTAGGAGGAGAGGGAGGTCTGGTTGGGGGGGACATTCACATCATTTTATTTTGGTCTGGATGATGGTCT
 GAGCCAGGGCACATAGAACACTGCTATCCATGCAGCCTTTGGGCCCCAGGGAACGGTCACCCTGTAAAGT
 GCTCAGAGTCGGAGTCCAGCACCTCCCCAGTGGTGGCAGCTGTTCCATGCCTGCTCTGTTTCAGCTCTT
 CTGAGACAGGGAGGAGGAGCCAAGGAGCTGTGAAGGGGAGGGGCAGGAGGACTTGCAGGTTTTGTGA
 AGCAGCGATCTAGTTTCATTAATAAAAAAAAAAAGCTACACAGTAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_134129

Insert Size: 1515 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:

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: [BC004070](#), [AAH04070](#)

RefSeq Size: 2087 bp

RefSeq ORF: 1515 bp

Locus ID: 28000

UniProt ID: [Q99KP6](#)

Cytogenetics: 19 7.33 cM

Gene Summary: Isoform 1: Ubiquitin-protein ligase which is a core component of several complexes mainly involved in pre-mRNA splicing and DNA repair. Required for pre-mRNA splicing as component of the spliceosome. Core component of the PRP19C/Prp19 complex/NTC/Nineteen complex which is part of the spliceosome and participates in its assembly, its remodeling and is required for its activity. During assembly of the spliceosome, mediates 'Lys-63'-linked polyubiquitination of the U4 spliceosomal protein PRPF3. Ubiquitination of PRPF3 allows its recognition by the U5 component PRPF8 and stabilizes the U4/U5/U6 tri-snRNP spliceosomal complex. Recruited to RNA polymerase II C-terminal domain (CTD) and the pre-mRNA, it may also couple the transcriptional and spliceosomal machineries. The XAB2 complex, which contains PRPF19, is also involved in pre-mRNA splicing, transcription and transcription-coupled repair. Beside its role in pre-mRNA splicing PRPF19, as part of the PRP19-CDC5L complex, plays a role in the DNA damage response/DDR. It is recruited to the sites of DNA damage by the RPA complex where PRPF19 directly ubiquitinates RPA1 and RPA2. 'Lys-63'-linked polyubiquitination of the RPA complex allows the recruitment of the ATR-ATRIP complex and the activation of ATR, a master regulator of the DNA damage response. May also play a role in DNA double-strand break (DSB) repair by recruiting the repair factor SETMAR to altered DNA. As part of the PSO4 complex may also be involved in the DNA interstrand cross-links/ICLs repair process. In addition, may also mediate 'Lys-48'-linked polyubiquitination of substrates and play a role in proteasomal degradation (PubMed:17349974). May play a role in the biogenesis of lipid droplets (PubMed:17118936). May play a role in neural differentiation possibly through its function as part of the spliceosome (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the central coding region, compared to variant 1. This results in a shorter protein (isoform 2), compared to 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.