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Product datasheet for MC228154

Prpf19 (NM_001253843) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prpf19 (NM_001253843) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Prpf19
Synonyms:	AA617263; AL024362; D19Wsu55e; NMP200; Prp19; PSO4; Snev
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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Fully Sequenced ORF:

>MC228154 representing NM_001253843
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCCTGATCTGCTCGATCTCCAATGAAGTGCCAGAGCACCCGTGCGTGTCCCCTGTCTCTAATCATG
TGTATGAGCGGCGACTCATTGAGAAGTACATTGCAGAGAATGGCACAGATCCTATCAACAACCAGCCTCT
CTCAGAGGAGCAGCTCATCGACATCAAAGTTGCTCACCCAATCCGACCCAAGCCTCCCTCCGCCACCAGC
ATCCCAGCCATTCTGAAAGCCTTGCAGGATGAGTGGGGTTGGCCGAATTCTCCGGCTCTCCCCCAGTCCT
CACAGTGGCCTACCCTCTCCCAGGATGCAGTCATGCTGCACAGCTTCACTCTTCGCCAGCAACTGCAGAC
AACCCGCCAGGAGCTGTCCCATGCTCTGTACCAACACGATGCTGCCTGCCGAGTCATTGCCCGGCTCACC
AAAGAGGTCACTGCTGCTCGAGAAGCTCTGGCTACTCTGAAACCACAGGCTGGGCTTATTGTACCTCAGG
CTGTGCCAAGCTCACAGCCCAGTGTTGTGGGTGCAGGAGAGCCCATGGATTTGGGTGAGCTGGTGGGAAT
GACCCCTGAGATTATCCAGAAGCTTCAAGACAAGGCTACTGTGCTAACCACGGAGCGTAAGAAGAGAGGA
AAGACTGTCCCCGAGGAGCTGGTGAAACCTGAAGAGCTCAGCAAGTACCGGCAGGTGGCATCCCATGTGG
GTCTACACAGTGCTAGCATTCCTGGGATTCTCGCTCTGGACCTGTGTCCCTCAGACACCAACAAGATTCT
CACTGGTGGGGCAGATAAAAATGTTGTTGTCTTTGATAAGAGTACTGAGCAAATATTGGCCACTCTCAAA
GGCCATACCAAGAAGGTCACCAGTGTGGTGTTTCATCCTTCTCAGGAACTGGTGTTTTCTGCGTCCCCTG
ATGCTACTATCAGGATTTGGTCAGTCCCGAACACTTCCTGCGTACAGGTTGTTCGGGCCCATGAGAGTGC
AGTGACAGGCCTCAGCCTCCATGCTACTGGAGACTATCTCCTGAGCTCCTCTGATGATCAGTACTGGGCC
TTCTCTGACATCCAGACAGGGCGTGTGCTCACTAAGGTGACAGATGAGACCTCCGGCTGCTCTCTTACCT
GTGCACAGTTCCACCCTGATGGGCTCATCTTTGGAACAGGAACCATGGACTCCCAGATCAAGATCTGGGA
CTTGAAGGAGCGTACCAATGTGGCCAACTTCCCTGGCCATTCTGGCCCCATTACCAGCATCGCCTTCTCT
GAGAATGGGTACTACCTGGCCACAGCAGCTGATGATTCCTCAGTCAAGCTCTGGGACTTACGCAAGTTGA
AGAACTTCAAGACATTGCAGCTGGACAACAACTTTGAGGTGAAGTCACTAATCTTTGACCAGAGCGGTAC
CTACCTGGCGCTTGGGGGTACAGATGTCCAGATCTACATCTGCAAACAATGGACAGAGATTCTTCACTTT
ACAGAGCACAGTGGCCTGACCACTGGAGTGGCCTTTGGACACCATGCCAAGTTCATCGCTTCAACTGGCA
TGGACAGGAGCCTCAAATTCTACAGTCTGTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001253843

Insert Size: 1572 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).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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:	NM_001253843.1, NP_001240772.1
RefSeq Size:	6218 bp
RefSeq ORF:	1572 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 (1) represents the longest transcript and encodes the longest 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.