

Product datasheet for MR229813

Prpf19 (NM_001253844) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prpf19 (NM_001253844) Mouse Tagged ORF Clone
Tag: Myc-DDK
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)
ORF Nucleotide Sequence: >MR229813 representing NM_001253844
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGCTGCACAGCTTCACTCTTCGCCAGCAACTGCAGACAACCCGCCAGGAGCTGTCCCATGCTCTGTACC
 AACACGATGCTGCCTGCCGAGTCATTGCCCGGCTACCAAAGAGGTCAGTCTGCTCGAGAAGCTCTGGC
 TACTCTGAAACCACAGGCTGGGCTTATTGTACCTCAGGCTGTGCCAAGCTCACAGCCAGTGTGTGGGT
 GCAGGAGAGCCCATGGATTTGGGTGAGCTGGTGGGAATGACCCCTGAGATTATCCAGAAGCTTCAAGACA
 AGGCTACTGTGCTAACCCGGAGCGTAAGAAGAGAGGAAAGACTGTCCCGAGGAGCTGGTAAACCTGA
 AGAGCTCAGCAAGTACCGGCAGGTGGCATCCCATGTGGGTCTACACAGTGTAGCATTCCCTGGGATTCTC
 GCTCTGGACCTGTGTCCCTCAGACACCAACAAGATTCTCACTGGTGGGGCAGATAAAAAATGTTGTTGTCT
 TTGATAAGAGTACTGAGCAAATATTGGCCACTCTCAAAGGCCATACCAAGAAGGTCACCAGTGTGGTGT
 TCATCCTTCTCAGGAAGTGGTGTCTTCTGCGTCCCCTGATGCTACTATCAGGATTTGGTCAGTCCCAGAC
 ACTTCTGCGTACAGGTTGTTCCGGGCCATGAGAGTGCAGTGACAGGCCTCAGCCTCCATGCTACTGGAG
 ACTATCTCCTGAGCTCCTCTGATGATCAGTACTGGGCTTCTCTGACATCCAGACAGGGCGTGTGCTCAC
 TAAGGTGACAGATGAGACCTCCGGCTGCTCTTACCTGTGCACAGTCCACCCTGATGGGCTCATCTTT
 GGAACAGGAACCATGGACTCCCAGATCAAGATCTGGGACTTGAAGGAGCGTACCAATGTGGCAACTTCC
 CTGGCCATTCTGGCCCCATTACCAGCATCGCCTTCTCTGAGAATGGTACTACCTGGCCACAGCAGCTGA
 TGATTCCTCAGTCAAGCTCTGGGACTTACGCAAGTTGAAGAAGTCAAGACATTGCAGCTGGACAACAAC
 TTTGAGGTGAAGTCACTAATCTTTGACCAGAGCGGTACCTACCTGGCGCTTGGGGGTACAGATGTCCAGA
 TCTACATCTGAAACAATGGACAGAGATTCTTCACTTTACAGAGCACAGTGGCCTGACCACTGGAGTGGC
 CTTTGGACACCATGCCAAGTTCATCGTTCACACTGGCATGGACAGGAGCCTCAAATCTACAGTCTG

ACGGCTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >MR229813 representing NM_001253844
Red=Cloning site Green=Tags(s)

MLHSFTLRQQLQTTTRQELSHALYQHDAACRVIARLTKEVTAAREALATLKPQAGLIVPQAVPSSQPSVVG
 AGPEMDLGELVGMTPEIIQKLQDKATVL TTERKKRGTVPPEELVKPEELSKYRQVASHVGLHSASIPGIL
 ALDLCPSTNLIKLTGGADKNVVVFDKSTEQILATLKGHTKKVTSVVFHPSQELVFSASPDATIRIWSVFN
 TSCVQVRAHESAVTGLSLHATGDYLLSSDDQYWAFSDIQTGRVLTkVTDETSGCSLTCAQFHPDGLIF
 GTGTMSQIKIIDLKERTNVANFPGHSGPITSIASFSENGYYLATAADDSSVKLWDLRKLKNFKTLQLDNN
 FEVKSLIFDQSGTYLALGGTDVQIYICKQWTEILHFTEHSGLTGVAFGHHAKEIASTGMDRSLKFYSL

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_001253844

ORF Size: 1257 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.

RefSeq: [NM_001253844.1](#), [NP_001240773.1](#)

RefSeq Size: 5811 bp

RefSeq ORF: 1260 bp

Locus ID: 28000

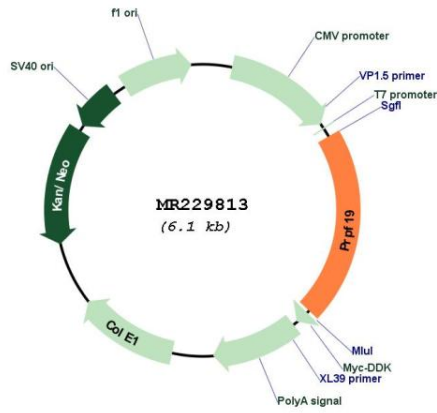
UniProt ID: [Q99KP6](#)

Cytogenetics: 19 7.33 cM

MW: 46.2 kDa

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]

Product images:



Circular map for MR229813