

## Product datasheet for RC201921

### Prion protein PrP (PRNP) (NM\_001080123) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prion protein PrP (PRNP) (NM_001080123) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prion protein PrP
Synonyms:	AltPrP; ASCR; CD230; CJD; GSS; KURU; p27-30; PRIP; PrP; PrP27-30; PrP33-35C; PrPc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201921 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGAACCTTGGCTGCTGGATGCTGGTTCTCTTTGTGGCCACATGGAGTGACCTGGGCCTCTGCAAGA  
AGCGCCCGAAGCCTGGAGGATGGAACACTGGGGGCAGCCGATACCCGGGGCAGGGCAGCCCTGGAGGCAA  
CCGCTACCCACCTCAGGGCGGTGGTGGCTGGGGGCAGCCTCATGGTGGTGGCTGGGGGCAGCCTCATGGT  
GGTGGCTGGGGGCAGCCCATGGTGGTGGCTGGGGACAGCCTCATGGTGGTGGCTGGGGTCAAGGAGGTG  
GCACCCACAGTCAGTGAACAAGCCGAGTAAGCCAAAAACCAACATGAAGCACATGGCTGGTGGCTGCAGC  
AGCTGGGGCAGTGGTGGGGGCCTTGGCGCTACGTGCTGGGAAGTGCCATGAGCAGGCCCATCATACAT  
TTCGGCAGTGACTATGAGGACCGTTACTATCGTGAAAACATGCACCGTTACCCCAACCAAGTGTACTACA  
GGCCCATGGATGAGTACAGCAACCAGAACAACCTTTGTGCACGACTGCGTCAATATCACAATCAAGCAGCA  
CACGGTACCACAACCACCAAGGGGAGAACTTACCAGACCGACGTTAAGATGATGGAGCGCGTGGTT  
GAGCAGATGTGTATACCCAGTACGAGAGGGAATCTCAGGCCTATTACCAGAGAGGATCGAGCATGGTCC  
TCTTCTCTCCACCTGTATCCTCTGATCTCTTCTCATCTTCTGATAGTGGGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC201921 protein sequence  
Red=Cloning site Green=Tags(s)

MANLGCWMLVLFVATWSDLGLCKKRPKPGGWNTGGSRYPGQSPGGNRYPPQGGGGWGQPHGGGGWGQPHG  
 GGWGQPHGGGGWGQPHGGGGWGQGGGTHSQWNKPSKPKTNMKHMAGAAAAGAVVGGGLGGYVLGSAMSRPIIH  
 FGSDYEDRYRENMHRYPNQVYYRPMDEYSNQNNFVHDCVNITIKQHTVTTTTKGENFTEIDVKMMERVV  
 EQMCITQYERESQAYYQRGSSMVLFSPPVILLISFLIFLIVG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6511\\_c03.zip](https://cdn.origene.com/chromatograms/mk6511_c03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_001080123

**ORF Size:** 759 bp

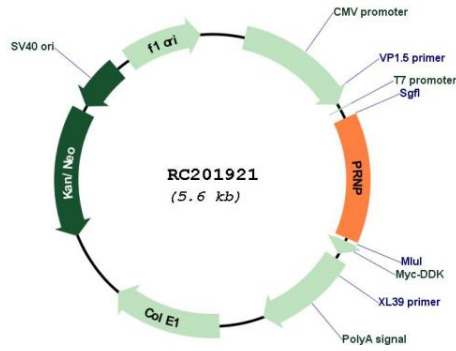
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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_001080123.3</u>
<b>RefSeq Size:</b>	2619 bp
<b>RefSeq ORF:</b>	762 bp
<b>Locus ID:</b>	5621
<b>UniProt ID:</b>	<u>P04156</u>
<b>Cytogenetics:</b>	20p13
<b>Protein Families:</b>	ES Cell Differentiation/IPS, Stem cell - Pluripotency, Transmembrane
<b>Protein Pathways:</b>	Prion diseases
<b>MW:</b>	27.6 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a membrane glycosylphosphatidylinositol-anchored glycoprotein that tends to aggregate into rod-like structures. The encoded protein contains a highly unstable region of five tandem octapeptide repeats. This gene is found on chromosome 20, approximately 20 kbp upstream of a gene which encodes a biochemically and structurally similar protein to the one encoded by this gene. Mutations in the repeat region as well as elsewhere in this gene have been associated with Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler disease, Huntington disease-like 1, and kuru. An overlapping open reading frame has been found for this gene that encodes a smaller, structurally unrelated protein, AltPrp. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]

Product images:



Circular map for RC201921