

## Product datasheet for **SC109634**

### Prion protein PrP (PRNP) (NM\_183079) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prion protein PrP (PRNP) (NM_183079) Human Untagged Clone
Tag:	Tag Free
Symbol:	Prion protein PrP
Synonyms:	AltPrP; ASCR; CD230; CJD; GSS; KURU; p27-30; PRIP; PrP; PrP27-30; PrP33-35C; PrPc
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_183079, the custom clone sequence may differ by one or more nucleotides

```
ATGGCGAACCTTGGCTGCTGGATGCTGGTTCTCTTTGTGGCCACATGGAGTGACCTGGGCCTCTGCAAGA  
AGCGCCCAGAGCCTGGAGGATGGAACACTGGGGGAGCCGATACCCGGGGCAGGGCAGCCCTGGAGGCAA  
CCGCTACCCACCTCAGGGCGGTGGTGGCTGGGGGAGCCCTCATGGTGGTGGCTGGGGGCAGCCTCATGGT  
GGTGGCTGGGGGAGCCCATGGTGGTGGCTGGGGACAGCCTCATGGTGGTGGCTGGGGTCAAGGAGGTG  
GCACCCACAGTCAGTGAACAAGCCGAGTAAGCCAAAAACCAACATGAAGCACATGGCTGGTGGCTGCAGC  
AGCTGGGGCAGTGGTGGGGGCCCTTGGCGCTACATGCTGGGAAGTGCCATGAGCAGGCCCATCATAAT  
TTCGGCAGTGACTATGAGGACCGTTACTATCGTAAAACATGCACCGTTACCCCAACCAAGTGTACTACA  
GGCCCATGGATGAGTACAGCAACCAGAACAACCTTTGTGCAGACTGCGTCAATATCAAAATCAAGCAGCA  
CACGGTACCACAACCACCAAGGGGAGAACTTACCCGAGACCGACGTTAAGATGATGGAGCGCGTGGTT  
GAGCAGATGTGTATCACCCAGTACGAGAGGGAATCTCAGGCCTATTACCAGAGAGGATCGAGCATGGTCC  
TCTTCTCTCTCCACCTGTGATCCTCCTGATCTCTTCTCATCTTCTGATAGTGGGATGA
```



[View online »](#)

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_183079 unedited NGGTTGTTCAAATTTGTATACGACTCCTATAGGCGGCCCGCAATTCGCACCAGGTCTCT CGAGCCAGTCGCTGACAGCCGCGCGCCGCGAGCTTCTCCTCTCCTCACGACCGAGGCAG AGCAGTCATTATGGCGAACCTTGGCTGCTGGATGCTGGTTCTCTTTGTGGCCACATGGAG TGACCTGGGCCTTGCAAGAAGCGCCCGAAGCCTGGAGGATGGAACACTGGGGGCAGCCG ATACCCGGGGCAGGGCAGCCCTGGAGGCAACCGCTACCCACCTCAGGGCGGTGGTGGCTG GGGGCAGCCTCATGGTGGTGGCTGGGGGCAGCCTCATGGTGGTGGCTGGGGGCAGCCCA TGGTGGTGGCTGGGGACAGCCTCATGGTGGTGGCTGGGGTCAAGGAGGTGGCACCCACAG TCAGTGAACAAGCCGAGTAAGCCAAAAACCAACATGAAGCACATGGCTGGTGGCTGCAGC AGCTGGGGCAGTGGTGGGGGCCTTGGCGGCTACATGCTGGGAAGTCCATGAGCAGGCC CATCATACATTTTCGGCAGTGACTATGAGGACCGTTACTATCGTAAAAACATGCACCGTTA CCCCACCAAGTGTACTACAGGCCCATGGATGAGTACAGCAACCAGAACAACCTTTGTGCA CGACTGCGTCAATATACAATCAAGCAGCACACGGTCACCACAACCACCAAGGGGGAGAA CTTCCACGAGACCGACGTTAAGATGATGGAGCGCGTGGTTGAGCAGATGTGTATACCCA GTACGAGAGGGAATCTCAGGCCTATTACCAGAGAGGATCGAGCATGGTCTCTTCTCCTC TCCACCTGTGATCCTNCTGATCTCTTCTCATCTTCTGATAGNGGGATGAGGAAAGGT CTCCTGTTNACCC
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_183079
<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>	<a href="#">NM_183079.1</a> , <a href="#">NP_898902.1</a>
<b>RefSeq Size:</b>	2479 bp
<b>RefSeq ORF:</b>	762 bp
<b>Locus ID:</b>	5621
<b>UniProt ID:</b>	<a href="#">P04156</a>
<b>Cytogenetics:</b>	20p13
<b>Protein Families:</b>	ES Cell Differentiation/IPS, Stem cell - Pluripotency, Transmembrane
<b>Protein Pathways:</b>	Prion diseases

**Gene Summary:**

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]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. This variant (2) encodes multiple distinct proteins due to the use of alternate translation initiation codons. The longer protein (Prp, PMID:21478263) represents the canonical protein, while a shorter protein (AltPrp, PMID:21478263) that uses a different, but overlapping reading frame has also been described. This RefSeq represents the longer protein, Prp. Variants 1-5 can all encode the same protein (Prp).