

## **Product datasheet for RC205438**

### OriGene Technologies, Inc.

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## Prion protein PrP (PRNP) (NM\_000311) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Prion protein PrP (PRNP) (NM\_000311) 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>RC205438 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$ 

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





**Protein Sequence:** >RC205438 protein sequence

Red=Cloning site Green=Tags(s)

MANLGCWMLVLFVATWSDLGLCKKRPKPGGWNTGGSRYPGQGSPGGNRYPPQGGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQGGGTHSQWNKPSKPKTNMKHMAGAAAAGAVVGGLGGYVLGSAMSRPIIH FGSDYEDRYYRENMHRYPNQVYYRPMDEYSNQNNFVHDCVNITIKQHTVTTTTKGENFTETDVKMMERVV EQMCITQYERESQAYYKRGSSMVLFSSPPVILLISFLIFLIVG

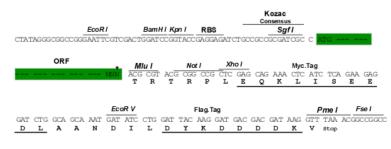
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6313">https://cdn.origene.com/chromatograms/mk6313</a> d09.zip

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_000311

ORF Size: 759 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:** <u>NM 000311.5</u>

 RefSeq Size:
 2755 bp

 RefSeq ORF:
 762 bp

 Locus ID:
 5621

 UniProt ID:
 P04156

 Cytogenetics:
 20p13

 Domains:
 prion

Protein Families: ES Cell Differentiation/IPS, Stem cell - Pluripotency, Transmembrane

**Protein Pathways:** Prion diseases

**MW:** 27.6 kDa

**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

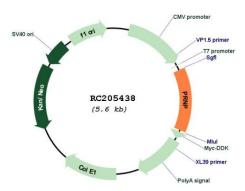
chromosome 20, approximately 20 kbp upstream of a gene which encodes a biochemically and structurally similar protein to the one encoded by this gene. Mutations in the repeat region as well as elsewhere in this gene have been associated with Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler 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]



# **Product images:**



Circular map for RC205438