

Product datasheet for RG216132

OriGene Technologies, Inc.

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Prion protein PrP (PRNP) (NM_183079) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Prion protein PrP (PRNP) (NM_183079) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: PRNP

Synonyms: AltPrP; ASCR; CD230; CJD; GSS; KURU; p27-30; PRIP; PrP; PrP27-30; PrP33-35C; PrPc

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG216132 representing NM_183079

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA





Protein Sequence: >RG216132 representing NM_183079

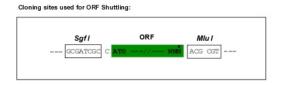
Red=Cloning site Green=Tags(s)

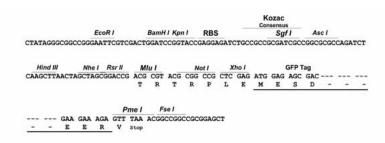
MANLGCWMLVLFVATWSDLGLCKKRPKPGGWNTGGSRYPGQGSPGGNRYPPQGGGGWGQPHGGGWGQPHGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQPHGGGWGQGGTHSQWNKPSKPKTNMKHMAGAAAAGAVVGGLGGYMLGSAMSRPIIH FGSDYEDRYYRENMHRYPNQVYYRPMDEYSNQNNFVHDCVNITIKQHTVTTTTKGENFTETDVKMMERVV EQMCITQYERESQAYYQRGSSMVLFSSPPVILLISFLIFLIVG

Restriction Sites:

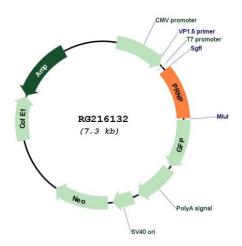
Sgfl-Mlul

Cloning Scheme:





Plasmid Map:



ACCN: NM_183079

ORF Size: 759 bp



Prion protein PrP (PRNP) (NM_183079) Human Tagged ORF Clone - RG216132

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 183079.4</u>

RefSeq Size: 2479 bp
RefSeq ORF: 762 bp
Locus ID: 5621
UniProt ID: P04156

Cytogenetics: 20p13

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

Protein Pathways: 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]