

## Product datasheet for MR228807

### Prnp (NM\_001278256) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prnp (NM_001278256) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prnp
Synonyms:	AA960666; AI325101; CD230; Prn-i; Prn-p; PrP; prP27-30; prP33-35C; PrP <sup>Sc</sup> ; PrPC; PrP <sup>Sc</sup> ; Sinc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR228807 representing NM_001278256 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCGAACCTTGGCTACTGGCTGCTGGCCCTCTTTGTGACTATGTGGACTGATGTGGCCTCTGCAAAA  
AGCGGCCAAAGCCTGGAGGGTGGAAACACCGGTGGAAGCCGGTATCCCGGGCAGGGAAGCCCTGGAGGCAA  
CCGTTACCCACCTCAGGGTGGCACCTGGGGCAGCCCCACGGTGGTGGCTGGGGACAACCCCATGGGGC  
AGCTGGGGACAACCTCATGGTGGTAGTTGGGGTCAGCCCCATGGCGGTGGATGGGGCAAGGAGGGGTA  
CCATAATCAGTGAACAAGCCAGCAAACCAAAACCAACCTCAAGCATGTGGCAGGGGCTGCGGCAGC  
TGGGGCAGTAGTGGGGGGCCTTGGTGGCTACATGCTGGGGAGCGCCATGAGCAGGCCCATGATCCATTTT  
GGCAACGACTGGGAGGACCGCTACTACCGTGAAAACATGTACCGTACCCTAACCAAGTGTACTACAGGC  
CAGTGGATCAGTACAGCAACCAGAACTTCGTGCACGACTGCGTCAATATCACCATCAAGCAGCACAC  
GGTCAACCACCACCAAGGGGAGAACTTACCAGAGCCGATGTGAAGATGATGGAGCGCGTGGTGGAG  
CAGATGTGCGTCACCCAGTACCAGAAGGAGTCCCAGGCCATTACGACGGGAGAAGATCCAGCAGCACCC  
TGCTTTTCTCCTCCCTCCTGTCTCCTCCTCATCTCCTCCTCATCTTCTCCTGATCGTGGGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR228807 representing NM\_001278256  
 Red=Cloning site Green=Tags(s)

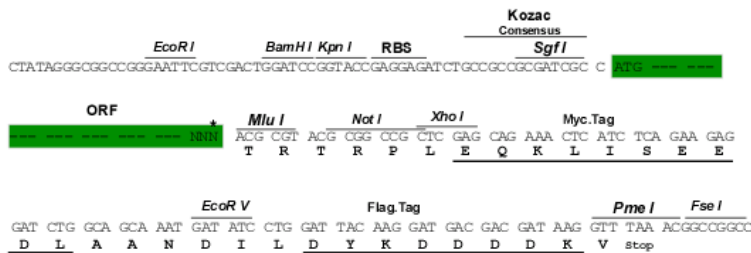
MANLGYWLLALFVTMWDVGLCKKRPKPGGWNTGGSRYPGQSPGGNRYPPQGGTGWQPHGGGWGQPHGG  
 SWGQPHGGSWGQPHGGGWQGGGTHNQWNKPSKPKTNLKHVAGAAAAGAVVGGGLGGYMLGSAMSRPMIHF  
 GNDWEDRYRENMYRYPNQVYYPVDQYSNQNNFVHDCVNITIKQHTVTTTKGENFTETDVKMMERVVE  
 QMCVTQYQKESQAYYDGRSSSTVLFSSPPVILLISFLIFLIVG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_001278256

**ORF Size:** 762 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\\_001278256.1](#), [NP\\_001265185.1](#)

**RefSeq Size:** 3732 bp

**RefSeq ORF:** 765 bp

**Locus ID:** 19122

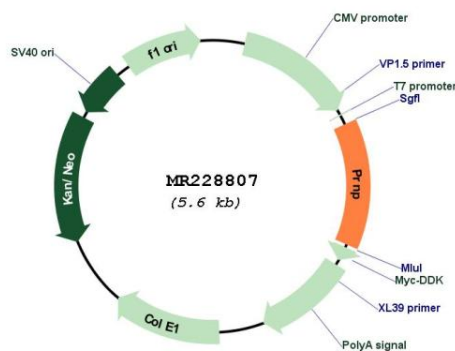
**UniProt ID:** [P04925](#)

**Cytogenetics:** 2 64.07 cM

**MW:** 28 kDa

**Gene Summary:** Its primary physiological function is unclear. May play a role in neuronal development and synaptic plasticity. May be required for neuronal myelin sheath maintenance. May promote myelin homeostasis through acting as an agonist for ADGRG6 receptor. May play a role in iron uptake and iron homeostasis. Soluble oligomers are toxic to cultured neuroblastoma cells and induce apoptosis (in vitro) (By similarity). Association with GPC1 (via its heparan sulfate chains) targets PRNP to lipid rafts. Also provides Cu(2+) or ZN(2+) for the ascorbate-mediated GPC1 deaminase degradation of its heparan sulfate side chains (PubMed:12732622, PubMed:16492732, PubMed:19242475, PubMed:19568430).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR228807