

Product datasheet for RC216500

PMP22 (NM_000304) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PMP22 (NM_000304) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PMP22
Synonyms: CIDP; CMT1A; CMT1E; DSS; GAS-3; GAS3; HMSNIA; HNPP; Sp110
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216500 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTCCTCTGTTGCTGAGTATCATCGTCTCCACGTCGCGGTGCTGGTCTGCTGTTCTCCACGA
TCGTCAGCCAATGGATCGTGGGCAATGGACACGCAACTGATCTCTGCCAGAACTGTAGCACCTCTTCCTC
AGGAAATGTCCACCACTGTTTCTCATCATCAACAAACGAATGGCTGCAGTCTGTCCAGGCCACCATGATC
CTGTGCATCATCTTCAGATTCTGTCTGTTCTCTGTTCTCTGCCAACTCTCACCTCACCAAGGGGG
GCAGGTTTACACTGGAATCTTCAAATTCTGCTGGTCTGTGCGTGATGAGTGCTGCGCCATCTA
CACGGTGAGGCACCCGGAGTGGCATCTCAACTCGGATTACTCCTACGGTTTCGCCTACATCTGGCCTGG
GTGGCCTTCCCCTGGCCCTTCTCAGCGGTGTCATCTATGTGATCTTGCGGAAACGCGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216500 protein sequence
Red=Cloning site Green=Tags(s)
MLLLLLSIIVLHVAVLVLLFVSTIVSQWIVNGHATDLWQNCSTSSSGNVVHCFSSSPNEWLQSVQATMI
LSIIFSILSLFLFFCQLFTLTKGGRFYITGIFQILAGLCVMSAAAITYVRHPEWHLNSDYSYGFAYILAW
VAFPLALLSGVIYVILRKRE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

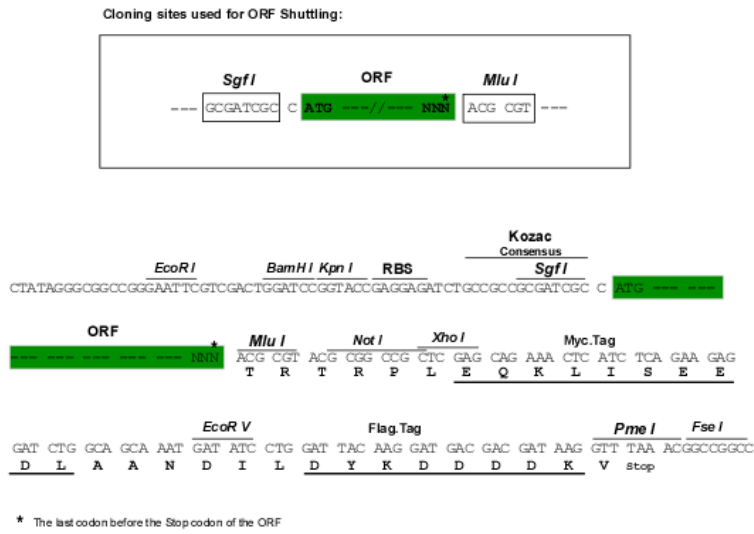
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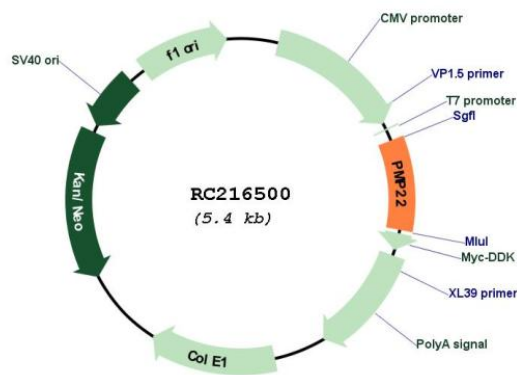
[View online >](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_000304

ORF Size: 480 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 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.

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_000304.4](#)

RefSeq Size: 1861 bp

RefSeq ORF: 483 bp

Locus ID: 5376

UniProt ID: [Q01453](#)

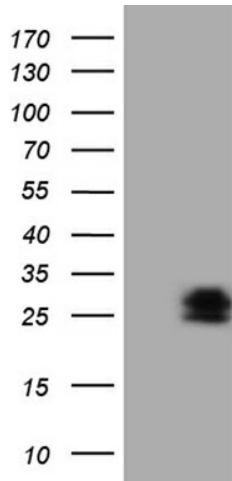
Cytogenetics: 17p12

Protein Families: Transmembrane

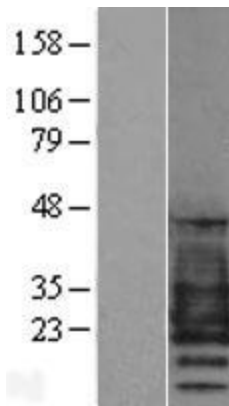
MW: 17.9 kDa

Gene Summary: This gene encodes an integral membrane protein that is a major component of myelin in the peripheral nervous system. Studies suggest two alternately used promoters drive tissue-specific expression. Various mutations of this gene are causes of Charcot-Marie-Tooth disease Type IA, Dejerine-Sottas syndrome, and hereditary neuropathy with liability to pressure palsies. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]

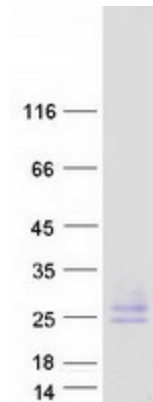
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PMP22 (Cat# RC216500, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PMP22 (Cat# [TA808964]). Positive lysates [LY424991] (100ug) and [LC424991] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403508]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC218781] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PMP22 protein (Cat# [TP316500]). The protein was produced from HEK293T cells transfected with PMP22 cDNA clone (Cat# RC216500) using MegaTran 2.0 (Cat# [TT210002]).