

Product datasheet for **RC218616**

PLP1 (NM_000533) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLP1 (NM_000533) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLP1
Synonyms:	GPM6C; HLD1; MMPL; PLP; PLP/DM20; PMD; SPG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218616 representing NM_000533 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGGCTTGTAGAGTGCTGTGCAAGATGTCTGGTAGGGGCCCTTTGCTTCCCTGGTGGCCACTGGAT
TGTGTTTCTTTGGGGTGGCACTGTTCTGTGGCTGTGGACATGAAGCCCTCACTGGCACAGAAAAGCTAAT
TGAGACCTATTTCTCAAAAACACCAAGACTATGAGTATCTCATCAATGTGATCCATGCCTTCCAGTAT
GTCATCTATGGAAGTGCCTCTTTCTTCTCCTTTATGGGGCCCTCCTGCTGGCTGAGGGCTTCTACACCA
CCGGCGCAGTCAGGCAGATCTTTGGCGACTACAAGACCACCATCTGCGGCAAGGGCTGAGCGCAACGGT
AACAGGGGGCCAGAAGGGGAGGGTTCCAGAGGCCAACATCAAGCTCATTCTTTGGAGCGGGTGTGTGAT
TGTTTGGGAAAATGGCTAGGACATCCCGACAAGTTTGTGGGCATCACCTATGCCCTGACCCTTGTGTGGC
TCCTGGTGTGGCTGCTGCTGTGCCTGTGTACATTTACTTCAACACCTGGACCACCTGCCAGTCTAT
TGCTTCCCAGCAAGACCTCTGCCAGTATAGGCAGTCTCTGTGCTGATGCCAGAATGTATGGTGTCTC
CCATGGAATGCTTTCCCTGGCAAGGTTTGTGGCTCCAACCTTCTGTCCATCTGCAAAACAGCTGAGTTCC
AAATGACCTTCCACCTGTTTATTGCTGCATTTGTGGGGCTGCAGCTACACTGGTTTCCCTGCTCACCT
CATGATTGCTGCCACTTACAACCTTGCCTCCTTAAACTCATGGGCCGAGGCCACCAAGTTC

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC218616 representing NM_000533
 Red=Cloning site Green=Tags(s)

MGLLECCARCLVGAPFASLVATGLCFFGVALFCGCGHEALTGTEKLIETYFSKNYQDYEYLINVIHAFQY
 VIYGTASFFFLYGALLLAEGFYTTGAVRQIFGDYKTTICGKLSATVTGGQKGRGSRGQHQAHLERVCH
 CLGKWLGHDPKFGITYALTVVWLLVFACSAVPVYIYFNTWTTCCQSIAPPSKTSASIGSLCADARMYGVL
 PWNAFP GKVCGSNLLSICKTAEFQMTFHLFIAAFVGAATLVSLTFMIAATYNFVAVLKL MGRGTKF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6107_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_000533

ORF Size: 831 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_000533.5](#)

RefSeq Size: 3038 bp

RefSeq ORF: 834 bp

Locus ID: 5354

UniProt ID: [P60201](#)

Cytogenetics: Xq22.2

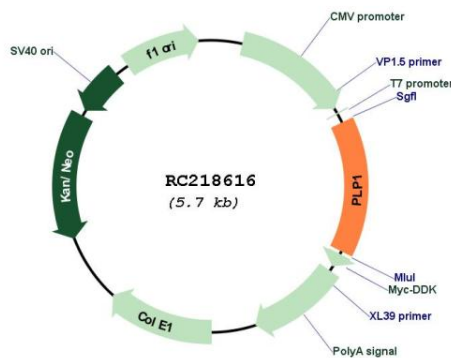
Domains: Myelin_PLP

Protein Families: Druggable Genome, Transmembrane

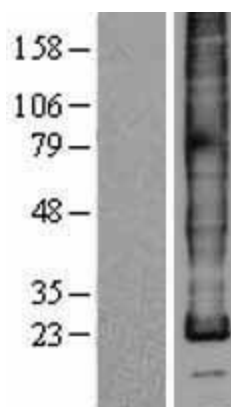
MW: 29.9 kDa

Gene Summary: This gene encodes a transmembrane proteolipid protein that is the predominant component of myelin. The encoded protein may play a role in the compaction, stabilization, and maintenance of myelin sheaths, as well as in oligodendrocyte development and axonal survival. Mutations in this gene cause Pelizaeus-Merzbacher disease and spastic paraplegia type 2. Alternatively splicing results in multiple transcript variants, including the DM20 splice variant. [provided by RefSeq, Feb 2015]

Product images:



Circular map for RC218616



Western blot validation of overexpression lysate (Cat# [LY426997]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225379] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).