

## Product datasheet for **RG218616**

### PLP1 (NM\_000533) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PLP1 (NM_000533) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PLP1
Synonyms:	GPM6C; HLD1; MMPL; PLP; PLP/DM20; PMD; SPG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218616 representing NM_000533 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCTTGTAGAGTGCTGTGCAAGATGTCTGGTAGGGGCCCTTTGCTTCCCTGGTGGCCACTGGAT  
TGTGTTCTTTGGGGTGGCACTGTTCTGTGGCTGTGGACATGAAGCCCTCACTGGCACAGAAAAGCTAAT  
TGAGACCTATTTCTCAAAAACACCAAGACTATGAGTATCTCATCAATGTGATCCATGCCTTCCAGTAT  
GTCATCTATGGAAGTGCCTCTTTCTTCTCCTTTATGGGGCCCTCCTGCTGGCTGAGGGCTTCTACACCA  
CCGGCGCAGTCAGGCAGATCTTTGGCGACTACAAGACCACCATCTGCGGCAAGGGCTGAGCGCAACGGT  
AACAGGGGGCCAGAAGGGGAGGGTTCCAGAGGCCAACATCAAGCTCATTCTTTGGAGCGGGTGTGTCAT  
TGTTTGGGAAAATGGCTAGGACATCCCGACAAGTTTGTGGGCATCACCTATGCCCTGACCCTTGTGTGGC  
TCCTGGTGTGGCTGCTGCTGTGCCTGTGTACATTTACTTCAACACCTGGACCACCTGCCAGTCTAT  
TGCTTCCCAGCAAGACCTCTGCCAGTATAGGCAGTCTCTGTGCTGATGCCAGAATGTATGGTGTCTC  
CCATGGAATGCTTCCCTGGCAAGGTTTGTGGCTCCAACCTTCTGTCCATCTGCAAAACAGCTGAGTTCC  
AAATGACCTTCCACCTGTTTATTGCTGCATTTGTGGGGCTGCAGCTACACTGGTTTCCCTGCTCACCT  
CATGATTGCTGCCACTTACAACCTTGCCTCCTTAAACTCATGGGCCGAGGCCAACCAAGTTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG218616 representing NM\_000533  
 Red=Cloning site Green=Tags(s)

MGLLECCARCLVGAPFASLVATGLCFFGVALFCGCGHEALTGTEKLIETYFSKNYQDYEYLINVIHAFQY  
 VIYGTASFFFLYGALLLAEGFYTTGAVRQIFGDYKTTICGKGLSATVTGGQKGRGSRGQHQHSLERVCH  
 CLGKWLGHDPKFGITYALTVVWLLVFACSAVPVYIYFNTWTTCCQSIAPPSKTSASIGSLCADARMYGVL  
 PWNAPGKVCGSNLLSICKTAEFQMTFHLFIAAFVGAATLVSLTFMIAATYNFVAVLKLMGRGTKF

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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](#)

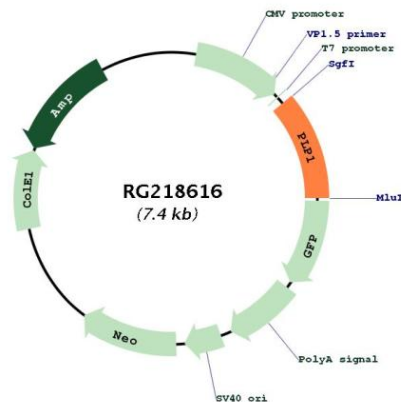
**Cytogenetics:** Xq22.2

**Domains:** Myelin\_PLP

**Protein Families:** Druggable Genome, Transmembrane

**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 RG218616