

Product datasheet for RC202450L4

OriGene Technologies, Inc.

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Myelin Protein Zero (MPZ) (NM_000530) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Myelin Protein Zero (MPZ) (NM_000530) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Myelin Protein Zero

Synonyms: CHM; CHN2; CMT1; CMT1B; CMT2I; CMT2J; CMT4E; CMTDI3; CMTDID; DSS; HMSNIB; MPP; P0

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

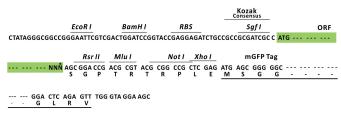
The ORF insert of this clone is exactly the same as(RC202450).

Sequence:

Restriction Sites: Sgfl-Rsrll

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_000530

ORF Size: 774 bp



Myelin Protein Zero (MPZ) (NM_000530) Human Tagged Lenti ORF Clone - RC202450L4

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 000530.3</u>

 RefSeq Size:
 1980 bp

 RefSeq ORF:
 747 bp

 Locus ID:
 4359

 UniProt ID:
 P25189

Cytogenetics: 1q23.3

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Cell adhesion molecules (CAMs)

MW: 28.5 kDa

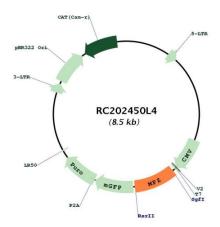
Gene Summary: This gene is specifically expressed in Schwann cells of the peripheral nervous system and

encodes a type I transmembrane glycoprotein that is a major structural protein of the peripheral myelin sheath. The encoded protein contains a large hydrophobic extracellular domain and a smaller basic intracellular domain, which are essential for the formation and stabilization of the multilamellar structure of the compact myelin. Mutations in this gene are associated with autosomal dominant form of Charcot-Marie-Tooth disease type 1 (CMT1B) and other polyneuropathies, such as Dejerine-Sottas syndrome (DSS) and congenital hypomyelinating neuropathy (CHN). A recent study showed that two isoforms are produced from the same mRNA by use of alternative in-frame translation termination codons via a stop

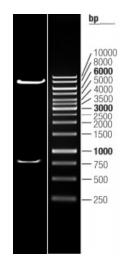
codon readthrough mechanism. [provided by RefSeq, Oct 2015]



Product images:



Circular map for RC202450L4



Double digestion of RC202450L4 using Sgfl and Rsrll $\,$