

## Product datasheet for PH302450

### Myelin Protein Zero (MPZ) (NM\_000530) Human Mass Spec Standard

#### Product data:

|                                       |  |
|---------------------------------------|--|
| Product Type:                         | Mass Spec Standards  |
| Description:                          | MPZ MS Standard C13 and N15-labeled recombinant protein (NP_000521)  |
| Species:                              | Human  |
| Expression Host:                      | HEK293   |
| Expression cDNA Clone or AA Sequence: | RC202450   |
| Predicted MW:                         | 28.5 kDa   |
| Protein Sequence:                     | >RC202450 protein sequence<br>Red=Cloning site Green=Tags(s)<br><br>MLRAPAPAPAMAPGAPSSSPSILAVLLFSSLVLSPAQAIVVYTDREVHGAVGSRVTLHCSFWSSEWVSD<br>DISFTWRYPQPEGGRDAISIFHYAKGQPYIDEVGTFKERIQWVGDPRWKDGSIWIHNLDSNGTFTCDVK<br>NPPDIVGKTSQVTLVYFEKVPTRYGVVLGAVIGGVLGVLLLLLFFYVVRYCWLRRQAALQRRLSAMEKG<br>KLHKPGKDASKRGRQTPVLYAMLHRSRSTKAVSEKKAKGLGESRKDKK<br><br>SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV |
| Tag:                                  | C-Myc/DDK  |
| Purity:                               | > 80% as determined by SDS-PAGE and Coomassie blue staining  |
| Concentration:                        | >0.05 µg/µL as determined by microplate BCA method   |
| Labeling Method:                      | Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine   |
| Buffer:                               | 25 mM Tris-HCl, 100 mM glycine, pH 7.3   |
| Storage:                              | Store at -80°C. Avoid repeated freeze-thaw cycles.   |
| Stability:                            | Stable for 3 months from receipt of products under proper storage and handling conditions.   |
| RefSeq:                               | <a href="#">NP_000521</a>  |
| RefSeq Size:                          | 1980   |
| RefSeq ORF:                           | 774  |
| Synonyms:                             | CHM; CHN2; CMT1; CMT1B; CMT2I; CMT2J; CMT4E; CMTDI3; CMTDID; DSS; HMSNIB; MPP; PO  |
| Locus ID:                             | 4359   |
| UniProt ID:                           | <a href="#">P25189</a>   |



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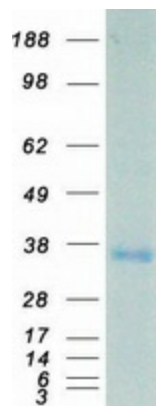
**Cytogenetics:** 1q23.3

**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]

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Cell adhesion molecules (CAMs)

### Product images:



Coomassie blue staining of purified MPZ protein (Cat# [TP302450]). The protein was produced from HEK293T cells transfected with MPZ cDNA clone (Cat# [RC202450]) using MegaTran 2.0 (Cat# [TT210002]).