

## Product datasheet for RN204943

### Mpz (NM\_017027) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mpz (NM_017027) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Mpz
Synonyms:	MPP; P0
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN204943 representing NM_017027 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTCCTGGGGCTCCCTCATCCAGCCCCAGCCCTATCCTGGCTGCCCTGCTCTTCTCTTTGGTGC  
TGTCCTCCCAACCCTGGCCATTGTGGTTTACACGGACAGGGAAGTCTATGGTGCTGTGGGCTCCAGGTGAC  
CCTGCACTGCTCCTTCTGGTCCAGTGAATGGGTCTCAGATGACATCTCTTTACCTGGCGCTACCAGCCT  
GAAGGAGGCCGAGATGCCATTTCAATCTTCCACTATGCCAAGGGTCAACCTTACATCGATGAGGTGGGA  
CCTTCAAGGAGCGCATCCAGTGGGTAGGGGACCCTAGCTGGAAGGATGGCTCCATTGTCATACACAACCT  
AGACTACAGTGACAACGGCACTTTCACATGTGATGTCAAAAACCCACCGACATAGTGGGCAAGACGTCT  
CAGGTCACGCTCTATGTCTTTGAAAAAGTGCCCACTAGGTATGGGGTGGTGTGGGAGCCGTGATCGGTG  
GCATCCTCGGGGTGGTGTGTTGCTGCTGTTGCTCTTCTACCTGATCCGGTACTGCTGGCTGCGCAGGCA  
GGCTGCCCTGCAGAGGAGGCTCAGTGCCATGGAGAAGGGGAAATTTACAAGTCTTCAAGGACTCCTCG  
AAGCGCGGGCGGCAGACGCCAGTGTGTATGCCATGCTGGACCACAGCCGAAGCACCAAGCTGCCAGT  
AGAAGAAATCTAAAGGGCTGGGGGAGTCTCGCAAGGATAAGAAATAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_017027
Insert Size:	747 bp


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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_017027.2</a></u> , <u><a href="#">NP_058723.2</a></u>
<b>RefSeq Size:</b>	2018 bp
<b>RefSeq ORF:</b>	747 bp
<b>Locus ID:</b>	24564
<b>UniProt ID:</b>	<u><a href="#">P06907</a></u>
<b>Cytogenetics:</b>	13q24
<b>Gene Summary:</b>	<p>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 the orthologous gene in human are associated with myelinating neuropathies. 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]</p> <p>Transcript Variant: This transcript (1) encodes two isoforms, which result from the use of alternative in-frame translation termination codons. The shorter isoform (MPZ, also known as P0) results from translation termination at the upstream UAG stop codon, while the longer isoform (L-MPZ) results from UAG stop codon readthrough to the downstream UGA termination codon. This RefSeq represents the shorter isoform (MPZ).</p>