

## MPZ,P0 Polyclonal Antibody

Catalog number: 10572-1-AP

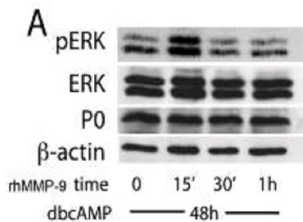
Size: 28 µg/150 µl

Source: Rabbit

Isotype: IgG

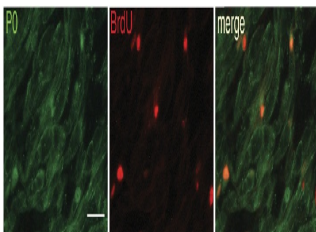
Synonyms:

MPZ; CHM, CMT1, CMT1B, CMT2I, CMT2J, CMT4E, CMTDI3, DSS, HMSNIB, MPP, MPZ, Myelin peripheral protein, Myelin protein P0, myelin protein zero, P0



WB result from Chattopadhyay S (PMID:19229995); Schwann cell differentiation was induced with dbcAMP (500 µM) for 48 h, followed by treatment with rhMMP-9 (100 nM) for 15 min. A, rhMMP-9 stimulates transient ERK1/2 activation over a 1 h period.

Successful Schwann cell differentiation was confirmed by myelin protein zero (P0) expression, β-actin was used as loading control.



IF result from Huaqing Liu (PMID:20448483); Dual immunofluorescence for BrdU (red) with phenotypic cell markers (green) in distal segments of MMPi-treated promotes Schwann cell (SC) mitosis in regenerating nerves. myelinating SCs (mSCs) (P0)

### Background

MPZ (myelin protein zero), also known as P0, a transmembrane glycoprotein (~30 kDa), is a member of the immunoglobulin supergene family. Synthesized by myelin-forming Schwann cells, MPZ is the major structural protein component of myelin in the peripheral nervous system. It is involved in formation and maintenance of compact myelin, and plays a role in the creation of an extracellular membrane face which guides the wrapping process and ultimately compacts adjacent lamellae. More than 120 mutations detected in the gene of MPZ cause various forms of hereditary neuropathy, which include Charcot-Marie-Tooth disease type 1B (CMT1B), CMT2, Dejerine-Sottas syndrome (DSS), and congenital hypomyelination neuropathy (CHN). This antibody can recognize endogenous MPZ, and can be used as a marker of myelinating Schwann cells.

### Applications

Tested applications:	ELISA, WB, IF
Cited applications:	IF, IHC, WB
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Human, mouse, rat
Calculated MPZ,P0 MW:	27.5 kDa
Observed MPZ,P0 MW:	30 kDa
Positive WB detected in	Schwann cells
Positive IF detected in	Myelinating SCs cells
Recommended dilution:	WB: 1:200-1:2000 IF: 1:20-1:200

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

Immunogen:	Ag0848
GenBank accession number:	BC006491
Gene ID (NCBI):	4359
Full name:	Myelin protein zero

### Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.