

MPZ / P0 Polyclonal antibody

Catalog Number: 10572-1-AP

17 Publications

Basic Information

Catalog Number:

10572-1-AP

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0848

GenBank Accession Number:

BC006491

GeneID (NCBI):

4359

UNIPROT ID:

P25189

Full Name:

myelin protein zero

Calculated MW:

28 kDa

Observed MW:

28-30 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC, IF, ColP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, frog

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse brain tissue, mouse skeletal muscle tissue, rat brain tissue

IHC : rat Ischiadic nerve tissue, mouse Ischiadic nerve tissue

Background Information

MPZ (myelin protein zero), also known as P0, is a transmembrane glycoprotein that belongs to 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 the 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. MPZ can be detected the 25-30 kDa band by western blot. A band of 36 kDa could also be detected, which is a novel isoform of MPZ that contains an additional domain at the C-terminal (PMID: 22457349). It can also exist as a dimer (PMID: 12933931).

Notable Publications

Author	Pubmed ID	Journal	Application
Yoshihide Yamaguchi	29081003	Neurochem Res	WB
Xiaobao Gong	36218239	Phytother Res	WB,IF
Christoph Eckharter	26635533	Front Cell Neurosci	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

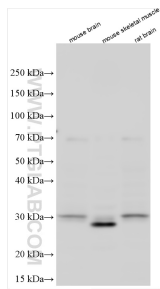
For technical support and original validation data for this product please contact:

T: 4006900926

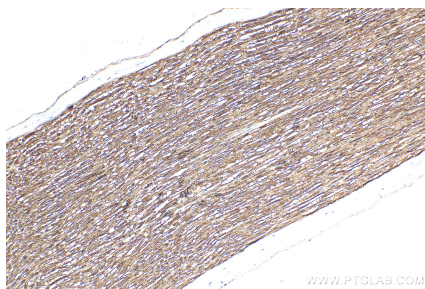
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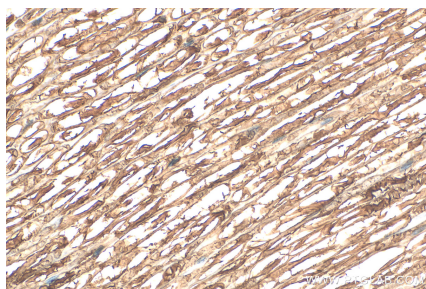
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 10572-1-AP (MPZ / P0 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded rat Ischiadic nerve tissue slide using 10572-1-AP (MPZ / P0 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat Ischiadic nerve tissue slide using 10572-1-AP (MPZ / P0 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).