

## Myelin Protein Zero / MPZ Antibody

Mouse Monoclonal Antibody [Clone MPZ/7389]

Catalog No	Format	Size
4359-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4359-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4359-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

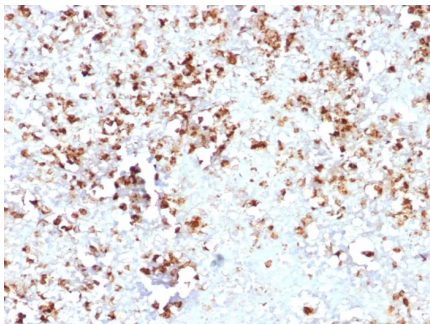
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

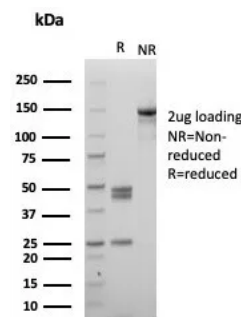
Clone	MPZ/7389
Gene Name	MPZ
Immunogen	Recombinant full-length human MPZ protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2a / Kappa
Mol. Weight of Antigen	28kDa
Cellular Localization	Membrane.
Species Reactivity	Human
Positive Control	Peripheral nerve cells.

\*Optimal dilution for a specific application should be determined.

### Product Images for Myelin Protein Zero / MPZ Antibody



Formalin-fixed, paraffin-embedded human colon carcinoma stained with MPZ Mouse Monoclonal Antibody (MPZ/7389). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified MPZ Mouse Monoclonal Antibody (MPZ/7389). Confirmation of Purity and Integrity of Antibody.

### **Specificity & Comments**

Zero, also known as myelin protein zero (MPZ) is a Type 1 integral membrane glycoprotein that mediates adhesion of spiraling wraps of the myelin sheath in order to ensure stable synaptic transmission. Zero protein encompasses approximately 50% of total protein in the sheath scaffolding in contribution to structural integrity of peripheral myelin. Zero guides the compact myelin wrapping process through glycine zipper packing interface-dependent dimer and tetramer formation. Mutations (e.g. G134R) can abrogate multimer formation, cause demyelinating neuropathies, and are known to contribute to conditions that include Charcot-Marie-Tooth disease. Zero cytoplasmic domain undergoes serine and tyrosine phosphorylation, which appears to be prevalent during peak nerve myelination. Zero transcript is moderate in brain, abundant in thymus and most abundant in white matter of the CNS.

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### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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### **Supplied As**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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### **Storage and Stability**

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

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### **Research Areas**

Developmental Biology

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