MAG Antibody / Axon-Glia Interaction Protein Antibody (R30843)

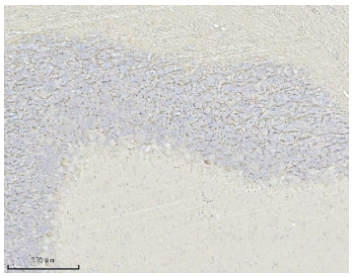
Catalog No.	Formulation	Size
R30843	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

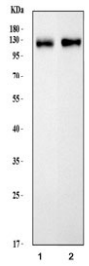
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P20916
Applications	Western blot: 0.5-1ug/ml (1) Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This MAG Antibody / Axon-Glia Interaction Protein Antibody is available for research use only.



MAG Antibody Mouse Brain IHC. Immunohistochemistry was performed on FFPE mouse brain tissue using MAG Antibody. Heat-induced epitope retrieval was carried out in pH 8 EDTA buffer prior to antibody incubation. Bound antibody was detected using an HRP-conjugated secondary antibody with DAB chromogen. Prominent staining is observed throughout the myelinated fiber network of the brain, while neuronal cell bodies exhibit comparatively little immunoreactivity, consistent with the localization of Myelin Associated Glycoprotein to oligodendrocyte myelin sheaths. These results demonstrate that this Axon-Glia Interaction Protein Antibody is suitable for immunohistochemical detection of endogenous MAG in formalin-fixed, paraffin-embedded mouse brain tissue.



MAG Antibody Rat Cerebellum IHC. Immunohistochemistry was performed on FFPE rat cerebellum tissue using MAG Antibody. Heat-induced epitope retrieval was carried out in pH 8 EDTA buffer prior to antibody incubation. Bound antibody was detected using an HRP-conjugated secondary antibody with DAB chromogen. Strong staining is observed within the cerebellar white matter and myelinated fiber tracts, while the adjacent granular layer shows comparatively weaker immunoreactivity, consistent with the localization of Myelin Associated Glycoprotein to oligodendrocyte myelin sheaths. These results demonstrate that this Axon-Glia Interaction Protein Antibody is suitable for immunohistochemical detection of endogenous MAG in formalin-fixed, paraffin-embedded rat cerebellum tissue.



MAG Antibody Rat and Mouse Brain WB. Western blot analysis was performed using MAG Antibody. Lane 1: rat brain tissue lysate; lane 2: mouse brain tissue lysate. A strong immunoreactive band is detected in both samples at approximately 98 kDa, within the commonly observed migration range of 68-98 kDa for Myelin Associated Glycoprotein, reflecting variable levels of glycosylation. The robust signal in both brain lysates is consistent with the abundant expression of MAG in oligodendrocyte myelin membranes. These results demonstrate that this Axon-Glia Interaction Protein Antibody is suitable for Western blot detection of endogenous MAG in rat and mouse brain tissue lysates.

Description

MAG Antibody / Axon-Glia Interaction Protein Antibody recognizes myelin associated glycoprotein (MAG), a membrane glycoprotein expressed by myelinating oligodendrocytes in the central nervous system and Schwann cells in the peripheral nervous system. MAG is concentrated at the innermost layer of the myelin sheath, where it forms a specialized interface between glial cells and axons. Through this strategic localization, MAG maintains stable communication between myelin-forming cells and neurons while supporting long-term axonal integrity. NSJ Bioreagents supplies MAG Antibody / Axon-Glia Interaction Protein Antibody for reliable detection of this essential nervous system protein across numerous research applications.

MAG functions as an adhesion and signaling molecule that regulates axon-glia interactions throughout development and adulthood. By binding sialylated glycoconjugates on neuronal membranes, MAG stabilizes the axon-myelin unit, promotes myelin maintenance, and contributes to the long-term survival of myelinated axons. In addition to preserving mature neural circuits, MAG is widely recognized for its inhibitory effects on axonal regeneration following injury, making it an important research target in studies of spinal cord injury, peripheral nerve repair, and regenerative neuroscience. Consequently, MAG Antibody / Axon-Glia Interaction Protein Antibody is widely used to investigate neuron-glia communication, myelin biology, axonal maintenance, and nervous system repair.

Abnormal MAG expression or function has been associated with demyelinating diseases, peripheral neuropathies, multiple sclerosis, leukodystrophies, traumatic nerve injury, and several neurodegenerative disorders. Autoantibodies directed against MAG are also implicated in immune-mediated neuropathies characterized by progressive sensory dysfunction and impaired nerve conduction. Because disruption of axon-glia communication contributes directly to neuronal degeneration, MAG has become an important biomarker for evaluating myelin integrity and nervous system health. Researchers frequently investigate MAG to better understand mechanisms governing myelin stability, axonal preservation, and remyelination.

A MAG Antibody / Axon-Glia Interaction Protein Antibody is a valuable reagent for investigating axon-glia signaling, myelin maintenance, neuronal communication, and nervous system development. By enabling reliable detection of Myelin Associated Glycoprotein, a MAG Antibody / Axon-Glia Interaction Protein Antibody supports research into demyelinating disease, neurodegeneration, peripheral neuropathy, and the molecular pathways that preserve healthy myelinated axons.

For a broader overview of this myelin protein and additional validated reagents, visit our MAG Antibody / Myelin

Associated Glycoprotein Antibody page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the MAG Antibody / Axon-Glia Interaction Protein Antibody may be required due to differences in protocols and secondary/substrate sensitivity.
1. MAG is seen in western blotting from 60~100KD depending on the level of glycosylation.

Immunogen

Amino acids 114-132 (KYYFRGDLGGYNQYTFSEH) were used as the immunogen for this MAG antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the MAG antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Myelin Associated Glycoprotein antibody, SIGLEC4A antibody, Siglec-4a antibody, Sialic Acid Binding Ig Like Lectin 4A antibody, Myelin Glycoprotein antibody, Myelin Adhesion Protein antibody

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