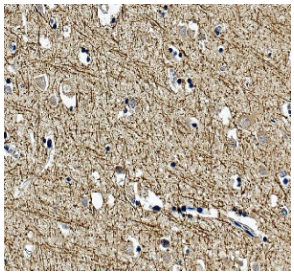
MAG Antibody / Myelin Associated Glycoprotein Antibody (FY13483)

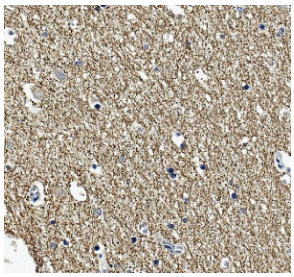
Catalog No.	Formulation	Size
FY13483	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

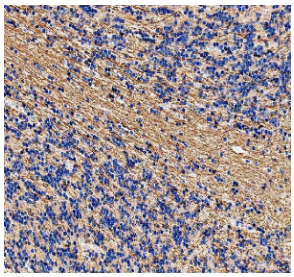
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P20916
Applications	Immunohistochemistry (FFPE) : 2-5ug/ml Western Blot : 0.5-1ug/ml
Limitations	This MAG Antibody / Myelin Associated Glycoprotein Antibody is available for research use only.



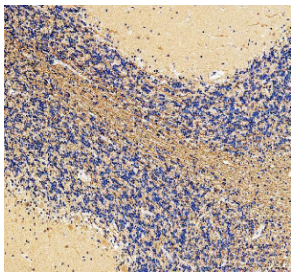
MAG Antibody Human Cerebral Cortex IHC. Immunohistochemistry was performed on FFPE human cerebral cortex tissue using MAG Antibody. Heat-induced epitope retrieval was carried out in pH 8 EDTA buffer prior to incubation with the primary antibody at 2 ug/ml. Bound antibody was detected using an HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB chromogen. Prominent staining is observed throughout the neuropil and myelinated fiber tracts, with comparatively little neuronal cell body staining, consistent with the localization of Myelin Associated Glycoprotein to oligodendrocyte myelin membranes. These results demonstrate that this Myelin Associated Glycoprotein Antibody is suitable for immunohistochemical detection of endogenous MAG in formalin-fixed, paraffin-embedded human cerebral cortex tissue.



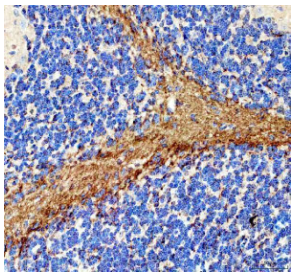
MAG Antibody Human Cerebral Cortex White Matter IHC. Immunohistochemistry was performed on FFPE human cerebral cortex tissue using MAG Antibody. Heat-induced epitope retrieval was carried out in pH 8 EDTA buffer prior to incubation with the primary antibody at 2 ug/ml. Bound antibody was detected using an HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB chromogen. Intense staining is observed throughout the myelinated fiber network within the cortical white matter, while neuronal cell bodies exhibit minimal immunoreactivity, consistent with the localization of Myelin Associated Glycoprotein to oligodendrocyte myelin membranes. These results demonstrate that this Myelin Associated Glycoprotein Antibody is suitable for immunohistochemical detection of endogenous MAG in formalin-fixed, paraffin-embedded human cerebral cortex tissue.



MAG Antibody Human Cerebellar White Matter IHC. Immunohistochemistry was performed on FFPE human cerebellum tissue using MAG Antibody. Heat-induced epitope retrieval was carried out in pH 8 EDTA buffer prior to incubation with the primary antibody at 2 ug/ml. Bound antibody was detected using an HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB chromogen. Strong linear staining is concentrated within the myelinated fibers of the cerebellar white matter, with comparatively weaker staining in the adjacent granular layer, consistent with the localization of Myelin Associated Glycoprotein to oligodendrocyte myelin sheaths. These results demonstrate that this Myelin Associated Glycoprotein Antibody is suitable for immunohistochemical detection of endogenous MAG in formalin-fixed, paraffin-embedded human cerebellum tissue.

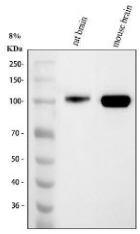


MAG Antibody Human Cerebellum IHC. Immunohistochemistry was performed on FFPE human cerebellum tissue using MAG Antibody. Heat-induced epitope retrieval was carried out in pH 8 EDTA buffer prior to incubation with the primary antibody at 2 ug/ml. Bound antibody was detected using an HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB chromogen. Strong immunoreactivity is observed within the myelin-rich white matter, while the cerebellar gray matter exhibits comparatively weaker staining, consistent with the localization of Myelin Associated Glycoprotein to oligodendrocyte myelin sheaths. These results demonstrate that this Myelin Associated Glycoprotein Antibody is suitable for immunohistochemical detection of endogenous MAG in formalin-fixed, paraffin-embedded human cerebellum tissue.



MAG Antibody Mouse Cerebellum IHC. Immunohistochemistry was performed on FFPE mouse cerebellum tissue using MAG Antibody. Heat-induced epitope retrieval was carried out in pH 8 EDTA buffer prior to incubation with the primary antibody at 2 ug/ml. Bound antibody was detected using an HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB chromogen. Strong immunoreactivity is observed within the cerebellar white matter and myelinated fiber tracts, while the surrounding granular layer exhibits comparatively weaker staining, consistent with the localization of Myelin Associated Glycoprotein to oligodendrocyte myelin sheaths. These results demonstrate that this Myelin Associated Glycoprotein Antibody is suitable for immunohistochemical detection of endogenous MAG in formalin-fixed, paraffin-embedded mouse cerebellum 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 incubation with the primary antibody at 2 ug/ml. Bound antibody was detected using an HRP-conjugated goat anti-rabbit IgG secondary antibody with DAB chromogen. Strong immunoreactivity is observed throughout the myelinated white matter, while the granular layer exhibits comparatively weaker staining, consistent with the localization of Myelin Associated Glycoprotein to oligodendrocyte myelin sheaths and cerebellar fiber tracts. These results demonstrate that this Myelin Associated Glycoprotein 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 specific immunoreactive band is detected at approximately 100 kDa in both samples, consistent with the heavily glycosylated mature form of Myelin Associated Glycoprotein, which commonly migrates above its predicted molecular weight of approximately 69 kDa. The strong signal in brain tissue reflects the abundant expression of MAG within myelinating oligodendrocytes and myelin-rich regions of the central nervous system. These results demonstrate that this Myelin Associated Glycoprotein Antibody is suitable for Western blot detection of endogenous MAG in rat and mouse brain tissue lysates.

Description

MAG Antibody / Myelin Associated Glycoprotein Antibody recognizes myelin associated glycoprotein (MAG), also known as SIGLEC4A, a type I transmembrane glycoprotein belonging to the sialic acid-binding immunoglobulin-like lectin family. MAG is expressed almost exclusively by myelinating oligodendrocytes in the central nervous system and Schwann cells in the peripheral nervous system, where it is concentrated within the periaxonal membrane of the myelin sheath. This strategic localization enables MAG to mediate critical interactions between myelinating glia and axons, supporting long-term axonal integrity and proper nerve function. NSJ Bioreagents supplies MAG Antibody / Myelin Associated Glycoprotein Antibody for reliable detection of this essential myelin-associated protein in a wide range of neuroscience applications.

MAG functions as an adhesion and signaling molecule that stabilizes axon-myelin interactions while regulating axonal growth and neuronal maintenance. By binding sialylated glycoconjugates on the axonal surface, MAG helps preserve mature neuronal architecture and contributes to myelin sheath stability. It is also well known for its ability to inhibit axonal regeneration following injury, making it an important target in studies of spinal cord injury, peripheral nerve repair, and regenerative neuroscience. Consequently, MAG Antibody / Myelin Associated Glycoprotein Antibody is widely used to investigate myelin formation, oligodendrocyte biology, neuron-glia communication, and mechanisms governing axonal regeneration.

Altered MAG expression has been associated with multiple sclerosis, peripheral neuropathies, leukodystrophies, traumatic nerve injury, and several neurodegenerative disorders. Autoantibodies directed against MAG are also implicated in demyelinating neuropathies characterized by sensory dysfunction and impaired nerve conduction. Because myelin integrity is fundamental to efficient neuronal signaling, MAG remains an important biomarker for studies of myelin maintenance, demyelination, remyelination, and nervous system repair. Researchers frequently investigate MAG to better understand white matter biology, axonal preservation, and the molecular pathways that regulate myelin stability.

A MAG Antibody / Myelin Associated Glycoprotein Antibody is a valuable reagent for investigating myelin biology, axon-glia interactions, oligodendrocyte function, and nerve regeneration. By enabling reliable detection of Myelin Associated Glycoprotein, a MAG Antibody / Myelin Associated Glycoprotein Antibody supports research into neurodegeneration, demyelinating disease, peripheral neuropathy, and the molecular mechanisms that maintain healthy myelinated axons.

Explore additional antibodies for studies of neurons, glial cells, myelin, and nervous system function on our Neuroscience

Antibodies page.

Application Notes

Optimal dilution of the MAG Antibody / Myelin Associated Glycoprotein Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human Myelin Associated Glycoprotein (amino acids E34-R605) was used as the immunogen for the MAG Antibody.

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 Associated Glycoprotein Precursor antibody, MAG Protein antibody