

MAG Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8845c**Specification**

MAG Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P20916](#)**MAG Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 4099**Other Names**

Myelin-associated glycoprotein, Siglec-4a, MAG, GMA

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP8845c](/products/AP8845c) was selected from the Center region of human MAG. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MAG Antibody (Center) Blocking Peptide - Protein Information**Name** MAG**Synonyms** GMA**Function**

Adhesion molecule that mediates interactions between myelinating cells and neurons by binding to neuronal sialic acid- containing gangliosides and to the glycoproteins RTN4R and RTN4RL2 (By similarity). Not required for initial myelination, but seems to play a role in the maintenance of normal axon myelination. Protects motoneurons against apoptosis, also after injury; protection against apoptosis is probably mediated via interaction with neuronal RTN4R and RTN4RL2. Required to prevent degeneration of myelinated axons in adults; this probably depends on binding to gangliosides on the axon cell membrane (By similarity). Negative regulator of neurite outgrowth; in dorsal root ganglion neurons the inhibition is mediated primarily via binding to neuronal RTN4R or RTN4RL2 and to a lesser degree via binding to neuronal gangliosides. In cerebellar granule cells the inhibition is mediated primarily via binding to neuronal gangliosides. In

sensory neurons, inhibition of neurite extension depends only partially on RTN4R, RTN4RL2 and gangliosides. Inhibits axon longitudinal growth (By similarity). Inhibits axon outgrowth by binding to RTN4R (By similarity). Preferentially binds to alpha-2,3-linked sialic acid. Binds ganglioside Gt1b (By similarity).

Cellular Location

Cell membrane; Single-pass type I membrane protein Membrane raft
{ECO:0000250|UniProtKB:P07722}

Tissue Location

Both isoform 1 and isoform 2 are detected in myelinated structures in the central and peripheral nervous system, in periaxonal myelin and at Schmidt-Lanterman incisures (PubMed:9495552, PubMed:6200494). Detected in optic nerve, in oligodendroglia and in periaxonal myelin sheaths (PubMed:6200494). Detected in compact myelin (at protein level) (PubMed:6200494). Both isoform 1 and isoform 2 are detected in the central and peripheral nervous system (PubMed:9495552)

MAG Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

MAG Antibody (Center) Blocking Peptide - Images**MAG Antibody (Center) Blocking Peptide - Background**

MAG is a type I membrane protein and member of the immunoglobulin superfamily. It is thought to be involved in the process of myelination. It is a lectin that binds to sialylated glycoconjugates and mediates certain myelin-neuron cell-cell interactions.

MAG Antibody (Center) Blocking Peptide - References

Stalder, A.K., et al., J. Neuropathol. Exp. Neurol. 68 (2), 148-158 (2009)