

Recombinant Mouse Mag Protein, His-tagged

Cat. No. Mag-475M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Mag (NP_034888.1) (Met1-Pro516) was expressed with a polyhistidine tag at the C-terminus.
Species	Mouse
Source	HEK293
ProteinLength	Met1-Pro516
Description	The myelin-associated glycoprotein (MAG) contains five immunoglobulin-like domains and belongs to the sialic-acid-binding subgroup of the Ig superfamily. MAG is a transmembrane glycoprotein of 100kDa localized in myelin sheaths of periaxonal Schwann cell and oligodendroglial membranes where it functions in glia-axon interactions. It appears to function both as a receptor for an axonal signal that promotes the differentiation, maintenance and survival of oligodendrocytes and as a ligand for an axonal receptor that is needed for the maintenance of myelinated axons. MAG contains a carbohydrate epitope shared with other glycosaminoglycans that is a target antigen in autoimmune peripheral neuropathy associated with IgM gammopathy and has been implicated in a dying back oligodendroglialopathy in multiple sclerosis. MAG is considered as a transmembrane protein of both CNS and PNS myelin and it strongly inhibits neurite outgrowth in both developing cerebellar and adult dorsal root ganglion neurons. In contrast, MAG promotes neurite outgrowth from newborn DRG neurons. Thus, MAG may be responsible for the lack of CNS nerve regeneration and may influence both temporally

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and spatially regeneration in the PNS.

Predicted N Terminal	Gly 20
Form	Lyophilized from sterile PBS, pH 7.4. Normally 5 %- 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Molecular Mass	The recombinant mouse Mag consists of 508 amino acids and predicts a molecular mass of 56.3 kDa
Endotoxin	< 1.0 EU per µg protein as determined by the LAL method.
Purity	> 95 % as determined by SDS-PAGE.
Storage	Samples are stable for up to twelve months from date of receipt at -70 centigrade. Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

GENE INFORMATION

Gene Name	Mag myelin-associated glycoprotein [<i>Mus musculus</i>]
Official Symbol	Mag
Synonyms	MAG; myelin-associated glycoprotein; Gma; siglec-4a; MGC123387;
Gene ID	17136

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mRNA Refseq	NM_010758
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Protein Refseq	NP_034888
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