

## Recombinant Mouse MAG/Siglec-4a Protein (ECD, Fc Tag)

**Catalog No.** PKSM040314

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

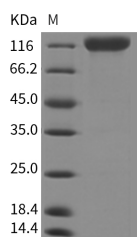
### Description

<b>Synonyms</b>	Myelin-Associated Glycoprotein;MAG;Siglec-4a
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met1-Pro516
<b>Accession</b>	NP_034888.1
<b>Calculated Molecular Weight</b>	81.6 kDa
<b>Tag</b>	C-hFc
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

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

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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 glycoconjugates that is a target antigen in autoimmune peripheral neuropathy associated with IgM gammopathy and has been implicated in a dying back oligodendrogliopathy 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 and spatially regeneration in the PNS.