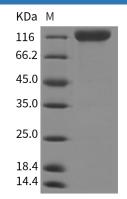
## Recombinant Mouse MAG/Siglec-4a Protein (ECD, Fc Tag)

## Catalog Number: PKSM040314

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

Description	
Species	Mouse
Source	HEK293 Cells-derived Mouse MAG/Siglec-4a protein Met1-Pro516, with an C-terminal
	hFc
Calculated MW	81.6 kDa
Accession	NP_034888.1
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.





> 95 % as determined by reducing SDS-PAGE.

## Background

## **Elabscience**®

The myelin-associated glycoprotein (MAG) contains five immunoglobulin-like domains and belongs to the sialic-acidbinding 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 maintence 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 dosal 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 influce both temporally and spatially regeneration in the PNS.