



# Recombinant Protein Technical Manual

## Recombinant Mouse MAG/Siglec-4a Protein (His Tag)

RPES1084

### Product Data:

**Product SKU:** RPES1084

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** P20917

### Protein Information:

**Molecular Mass:** 55.7 kDa

**AP Molecular Mass:** 7020 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS,pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Myelin-Associated Glycoprotein;MAG;Siglec-4a

## Immunogen Information:

**Sequence:** Gly20-Pro516

## Background:

Myelin-Associated Glycoprotein (MAG, Siglec-4a), is a type I transmembrane glycoprotein belonging to the Siglec family. It is composed of an extracellular segment containing five Ig-like domains, a single transmembrane segment, and a cytoplasmic domain. Mouse MAG shares 95% and 99% aa sequence identity with human and rat MAG, respectively. MAG functions as an adhesion molecule during neural development. It preferentially binds to alpha -2,3-linked sialic acid terminal structures found on cell surface molecules. MAG is selectively expressed by myelinating oligodendrocytes and Schwann cells and plays an important role in axon-myelin stability. MAG is also reported to regulate the axon cytoskeleton and support the distribution of axon molecules at the nodes of Ranvier. In addition, it has been identified as a major inhibitor of neurite outgrowth.