Biotinylated Mouse MAG / Siglec-4a Protein, His,Avitag™ (MALS verified)

Catalog # MAG-M82E9

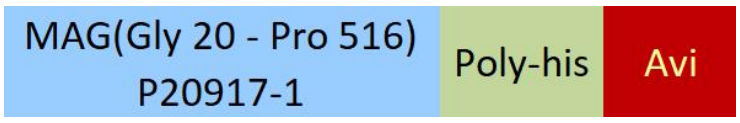
Synonym

MAG,Siglec-4a,GMA,S-MAG

Source

Biotinylated Mouse MAG, His,Avitag (MAG-M82E9) is expressed from human 293 cells (HEK293). It contains AA Gly 20 - Pro 516 (Accession # P20917-1).
Predicted N-terminus: Gly 20

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 58.4 kDa. The protein migrates as 70-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.5 M Arginine, pH7.4.
Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

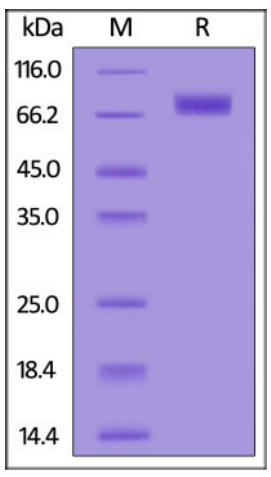
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

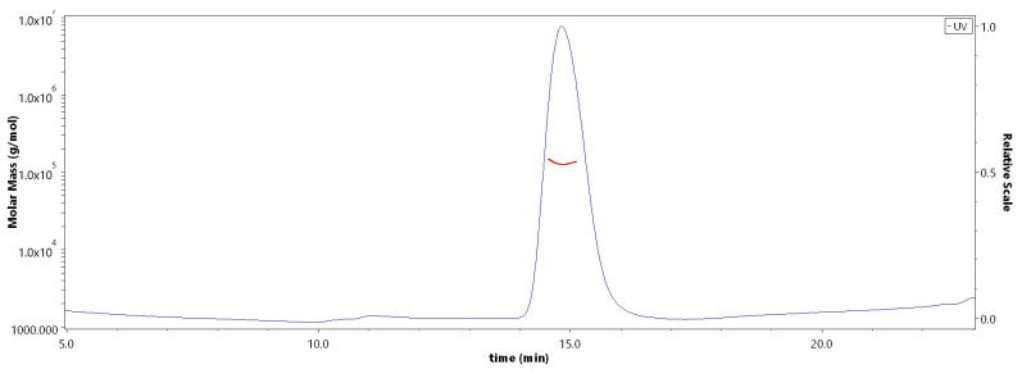
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Mouse MAG, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Biotinylated Mouse MAG, His,Avitag (Cat. No. MAG-M82E9) is more than 90% and the molecular weight of this protein is around 120-150 kDa verified by SEC-MALS.
Report

Background

Myelin-associated glycoprotein (MAG), a nervous system cell adhesion molecule, is an I-type lectin that binds to sialylated glycoconjugates, including gangliosides bearing characteristic structural determinants. Preferentially binds to alpha-2,3-linked sialic acid. Binds ganglioside Gt1b. 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. Protection against apoptosis is probably mediated via interaction with neuronal RTN4R and RTN4RL2. 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.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.