

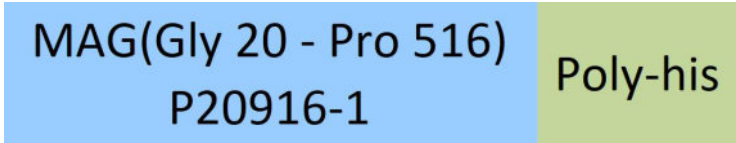
**Synonym**

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

**Source**

Human MAG, His Tag (MAG-H52H8) is expressed from human 293 cells (HEK293). It contains AA Gly 20 - Pro 516 (Accession # P20916-1).

Predicted N-terminus: Gly 20

**Molecular Characterization**


This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 56.6 kDa. The protein migrates as 65-95 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS with 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.*

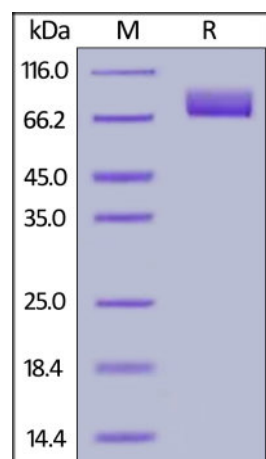
**Storage**

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**

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

**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.

### References

- (1) [Wörter V, et al. PLoS One. 2009. 4\(4\):e5218.](#)
- (2) [Mehta NR, et al. J Biol Chem. 2007. 282\(38\):27875-86.](#)
- (3) [Collins BE, et al. J Biol Chem. 1997. 272\(2\):1248-55.](#)

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.