

MAG/Siglec-4a Protein, Human (Biotinylated, HEK293, His-Avi)

Cat. No.:	HY-P78207
Synonyms:	MAG; Siglec4a; Siglec-4a; S-MAG; GMA
Species:	Human
Source:	HEK293
Accession:	P20916 (G20-P516)
Gene ID:	4099
Molecular Weight:	78-85 kDa

PROPERTIES

Biological Activity	Immobilized Anti-Siglec-4a Antibody at 2 μ g/ml (100 μ l/well) on the plate. Dose response curve for Biotinylated Human Siglec-4a, His Tag with the EC ₅₀ of 21.5ng/ml determined by ELISA.
Appearance	Solution.
Formulation	Supplied as a 0.22 μ m filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/ μ g, determined by LAL method.
Reconstitution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background

The MAG/Siglec-4a protein serves as an adhesion molecule facilitating interactions between myelinating cells and neurons by binding to neuronal sialic acid-containing gangliosides, as well as the glycoproteins RTN4R and RTN4RL2. Although not essential for initial myelination, MAG/Siglec-4a appears to play a crucial role in maintaining normal axon myelination and protecting motoneurons against apoptosis, particularly after injury. This protective effect is likely mediated through interactions with neuronal RTN4R and RTN4RL2. In adults, MAG/Siglec-4a is required to prevent degeneration of myelinated axons, possibly relying on binding to gangliosides on the axon cell membrane. Acting as a negative regulator of neurite outgrowth, MAG/Siglec-4a inhibits axon longitudinal growth and outgrowth by preferentially binding to alpha-2,3-linked sialic acid and interacting with RTN4R, RTN4RL2, and gangliosides. The protein exists as both a monomer and homodimer, and its interactions extend to include isoform 2 of BSG, contributing to its intricate role in modulating neuronal responses and axonal dynamics.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA