

MAG/Siglec-4a Protein, Mouse (HEK293, His, solution)

Cat. No.:	HY-P70319A
Synonyms:	rMuMyelin-associated glycoprotein/MAG, His; Myelin-Associated Glycoprotein; MAG; Siglec-4a
Species:	Mouse
Source:	HEK293
Accession:	P20917 (G20-P516)
Gene ID:	17136
Molecular Weight:	70-120 kDa

PROPERTIES

AA Sequence	<pre> GHWGAWMPST I S A F E G T C V S I P C R F D F P D E L R P A V V H G V W Y F N S P Y P K N Y P P V V F K S R T Q V V H E S F Q G R S R L L G D L G L R N C T L L L S T L S P E L G G K Y Y F R G D L G G Y N Q Y T F S E H S V L D I V N T P N I V V P P E V V A G T E V E V S C M V P D N C P E L R P E L S W L G H E G L G E P T V L G R L R E D E G T W V Q V S L L H F V P T R E A N G H R L G C Q A A F P N T T L Q F E G Y A S L D V K Y P P V I V E M N S S V E A I E G S H V S L L C G A D S N P P P L L T W M R D G M V L R E A V A K S L Y L D L E E V T P G E D G V Y A C L A E N A Y G Q D N R T V E L S V M Y A P W K P T V N G T V V A V E G E T V S I L C S T Q S N P D P I L T I F K E K Q I L A T V I Y E S Q L Q L E L P A V T P E D D G E Y W C V A E N Q Y G Q R A T A F N L S V E F A P I I L L E S H C A A A R D T V Q C L C V V K S N P E P S V A F E L P S R N V T V N E T E R E F V Y S E R S G L L L T S I L T I R G Q A Q A P P R V I C T S R N L Y G T Q S L E L P F Q G A H R L M W A K I G P </pre>
Appearance	Solution
Formulation	Supplied as a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, 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 is an adhesion molecule that plays a crucial role in mediating interactions between myelinating cells and neurons. It achieves this by binding to neuronal gangliosides containing sialic acid and to the glycoproteins RTN4R and RTN4RL2. While it is not necessary for initial myelination, it is involved in maintaining normal axon myelination. Additionally, it offers protection against apoptosis in motoneurons, particularly after injury, likely through its interaction with neuronal RTN4R and RTN4RL2. In adults, it is essential for preventing the degeneration of myelinated axons, and this process is likely dependent on its binding to gangliosides on the axon cell membrane. Moreover, the MAG/Siglec-4a protein acts as a negative regulator of neurite outgrowth by inhibiting axon growth longitudinally. Its inhibitory effects on neurite extension are mediated primarily through its interaction with neuronal RTN4R, RTN4RL2, and gangliosides. It binds preferentially to alpha-2,3-linked sialic acid and ganglioside Gt1b. The MAG/Siglec-4a protein can exist as a monomer or homodimer and interacts with isoform 2 of BSG through its first three N-terminal Ig-like domains.

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