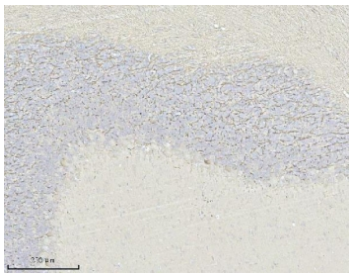
MAG Antibody (R30843)

Catalog No.	Formulation	Size
R30843	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P20916
Applications	Western Blot : 0.5-1ug/ml (1) Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This MAG antibody is available for research use only.

IHC staining of FFPE mouse brain tissue with MAG antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat cerebellum tissue with MAG antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Western blot testing of 1) rat brain and 2) mouse brain tissue lysate with MAG antibody. The protein is routinely visualized from 68~98 kDa, depending on level of glycosylation.

Description

Myelin-associated glycoprotein, also known as SIGLEC4A, is a cell membrane glycoprotein that is a member of the SIGLEC family of proteins and is a functional ligand of the NOGO-66 receptor, NgR. It is though to be involved in the process of myelination. Cleavage of GPI-linked proteins from axons protects growth cones from MAG-induced collapse, and dominant-negative NgR eliminates MAG inhibition of neurite outgrowth. Resistant embryonic neurons were rendered sensitive by expression of NgR. The glycoprotein binds specifically to an NgR-expressing cell line in a GPI-dependent and sialic acid-independent manner. Experiments blocking NgR from interacting with the glycoprotein prevented inhibition of neurite outgrowth by MAG. In cultured human embryonic kidney (HEK) cells expressing the NOGO receptor, p75(NTR) was required for MAG-induced intracellular calcium elevation.

Application Notes

The stated application concentrations are suggested starting points. Titration of the MAG antibody may be required due to differences in protocols and secondary/substrate sensitivity.
1. MAG is seen in western blotting from 60~100KD depending on the level of glycosylation.

Immunogen

Amino acids 114-132 (KYYFRGDLGGYNQYTFSEH) were used as the immunogen for this MAG antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the MAG antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.