

Product name:	Myelin Associated Glycoprotein (MAG)
Cat number:	AB-81354
Conjugate:	Unconjugated
Size:	100 ug
Clone:	POLY
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human MAG(114-132aa KYYFRGDLGGYNQYTFSEH), identical to the related rat and mouse sequences.
Reactivity:	Hu, Ms, Rat
Applications:	Western blot: 1:1000-1:12000 Immunohistochemistry (Paraffin-embedded Section): 1:100-1:200
Purification:	Aff. Pur.
Form:	Liquid
Buffer:	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ N.
Storage:	At -20°C for one year. Avoid repeated freezing and thawing.
Background:	MAG(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 thought to be involved in the process of myelination. MAG is a sialic acid binding SIGLEC protein and is a functional ligand for the Nogo receptor. The MAG gene is mapped on 19q13.12. Cleavage of GPI-linked proteins from axons protects growth cones from MAG-induced collapse, and dominant-negative NgR eliminates MAG inhibition of neurite outgrowth. MAG-resistant embryonic neurons were rendered MAG-sensitive by expression of NgR. MAG binds specifically to an NgR-expressing cell line in a GPI-dependent and sialic acid-independent manner. Experiments blocking NgR from interacting with MAG 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.