MAG Recombinant Antibody [PSH02-41] - Rat IgG1 (Chimeric) - BSA and Azide free

HA610254

Product Type:	Recombinant Chimeric Antibody, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	IHC-Fr, IHC-P, WB, IF-Tissue
Molecular Wt:	Predicted band size: 69 kDa
Clone number:	PSH02-41

Description: 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 (By similarity). Not required for initial myelination, but seems to play a role in the maintenance of normal axon myelination. Protects motoneurons against apoptosis, also after injury; protection against apoptosis is probably mediated via interaction with neuronal RTN4R and RTN4RL2. Required to prevent degeneration of myelinated axons in adults; this probably depends on binding to gangliosides on the axon cell membrane (By similarity). Negative regulator of neurite outgrowth; 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. Inhibits axon longitudinal growth (By similarity). Inhibits axon outgrowth by binding to RTN4R (By similarity). Preferentially binds to alpha-2,3-linked sialic acid. Binds ganglioside Gt1b (By similarity).

Immunogen: Recombinant protein within human MAG aa 1-536 / 626.

Positive control: Human cerebellum tissue, mouse cerebellum tissue, rat cerebellum tissue, Mouse cerebellum tissue lysate, Rat cerebellum tissue lysate.

Subcellular location: Cell membrane, Membrane raft.

Database links: SwissProt: P20916 Human | P20917 Mouse | P07722 Rat

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at 2-8℃. Avoid freeze.

Purity: Protein A affinity purified.

Images

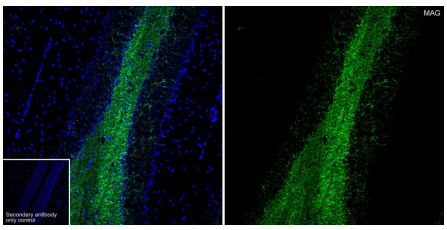

Fig1: This data was developed using HA601414, the same antibody clone in a different buffer formulation.
Application: IHC-Fr

Species: Mouse

Site: Cerebellum

Sample: Frozen section

Antibody concentration: 1/500

Antigen retrieval: Not required

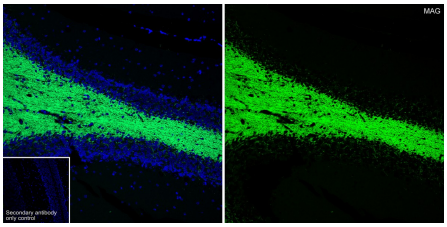

Fig2: This data was developed using HA601414, the same antibody clone in a different buffer formulation.
Application: IF-tissue

Species: Mouse

Site: Cerebellum

Sample: Paraffin-embedded section

Antibody concentration: 1/500

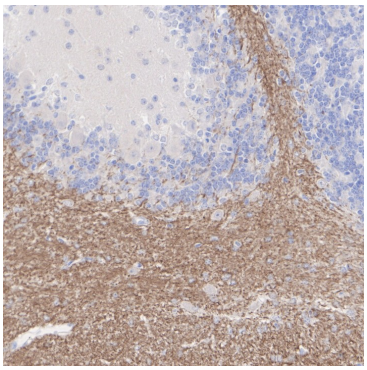

Fig3: This data was developed using HA601414, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rat anti-MAG antibody (HA601414) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA601414) at 1/500dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

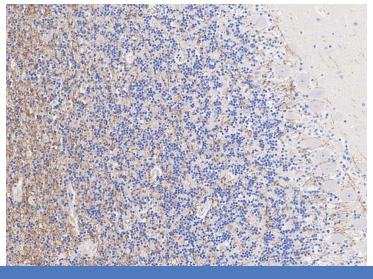

Fig4: This data was developed using HA601414, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human cerebellum tissue with Rat anti-MAG antibody (HA601414) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed

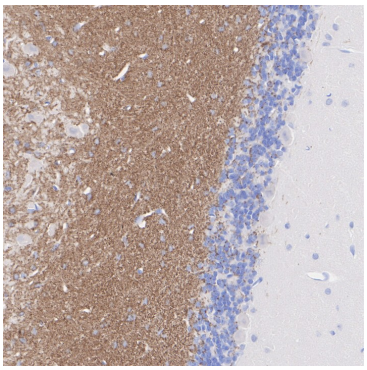

Fig5: This data was developed using HA601414, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue with Rat anti-MAG antibody (HA601414) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA601414) at 1/500dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

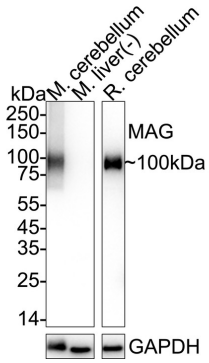

Fig6: This data was developed using HA601414, the same antibody clone in a different buffer formulation.
Western blot analysis of MAG on different lysates with Rat anti-MAG antibody (HA601414) at 1/2,000 dilution.

Lane 1: Mouse cerebellum tissue lysate
Lane 2: Mouse liver tissue lysate (negative)
Lane 3: Rat cerebellum tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 69 kDa
Observed band size: 100 kDa

Exposure time: Lane 1-2: 13 seconds; Lane 3: 21 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA601414) at 1/2,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rat IgG H&L - HRP Secondary Antibody (HA1023) at 1/5,000 dilution was used for 1 hour at room temperature.

Background References

1. Latov N et al. Anti-MAG neuropathy: historical aspects, clinical-pathological correlations, and considerations for future therapeutical trials. Arq Neuropsiquiatr. 2024 Jun
2. Steck AJ. Anti-MAG neuropathy: From biology to clinical management. J Neuroimmunol. 2021 Dec

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation