

MAG (D10H1) Rabbit mAb

✓ 100 µl
(10 western blots)

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For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #4099
Swiss-Prot Acc. #P20916

| Applications W Endogenous | Species Cross-Reactivity* H, M, R | Molecular Wt. 100 kDa | Isotype Rabbit IgG** |
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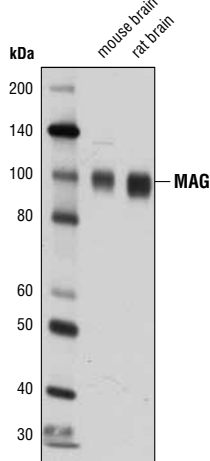
Background: Myelin-associated glycoprotein (MAG), which contains five immunoglobulin-like domains, is a highly glycosylated protein (1). MAG is a component of all myelinated internodes, whether formed by oligodendrocytes in the central nervous system (CNS) or by Schwann cells in the peripheral nervous system (PNS) (2), and has several functions. A known function of MAG is its inhibition of axonal regeneration after injury. It inhibits axonal outgrowth from adult dorsal root ganglion and in postnatal cerebellar, retinal, spinal, hippocampal, and superior cervical ganglion neurons (3). Interaction between MAG and several other molecules on the innermost wrap of myelin and complementary receptors on the opposing axon surface are required for long-term axon stability. Without MAG, myelin is still expressed, but long-term axon degeneration and altered axon cytoskeleton structure can be seen (4).

Specificity/Sensitivity: MAG (D10H1) Rabbit mAb recognizes endogenous levels of total MAG protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro70 of human MAG protein.

Background References:

- (1) Li, M. et al. (1996) *J Neurosci Res* 46, 404-14.
- (2) Nguyen, T. et al. (2009) *J Neurosci* 29, 630-7.
- (3) Yamashita, T. et al. (2002) *J Cell Biol* 157, 565-70.
- (4) Mehta, N.R. et al. (2010) *ACS Chem Neurosci* 1, 215-222.



Western blot analysis of extracts from mouse and rat brain using MAG (D10H1) Rabbit mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended complementary products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.