

MAG (h): 293T Lysate: sc-116497

BACKGROUND

Myelin-associated glycoprotein (MAG) is a nervous system cell-surface adhesion protein that is involved in linking myelinating glial cells to neuronal axons. MAG contains a sialic acid binding site and five IgG-like domains, thus identifying MAG as a member of a subgroup of the immunoglobulin superfamily. Like myelin, MAG inhibits axonal outgrowth and contributes to the inhibitory properties of myelin. Growth inhibition by MAG has been shown to be blocked when cerebellar neurons are pre-incubated with the neurotrophins BDNF or GDNF. It is suggested that this neurotrophin priming elevates cAMP and activates PKA.

REFERENCES

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- Schachner, M., et al. 2000. Multiple functions of the myelin-associated glycoprotein MAG (Siglec-4a) in formation and maintenance of myelin. *Glia* 29: 154-165.
- Vyas, A.A., et al. 2002. Gangliosides are functional nerve cell ligands for myelin-associated glycoprotein (MAG), an inhibitor of nerve regeneration. *Proc. Natl. Acad. Sci. USA* 99: 8412-8417.
- Paivalainen, S., et al. 2003. Degraded myelin-associated glycoprotein (dMAG) formation from pure human brain myelin-associated glycoprotein (MAG) is not mediated by Calpain or cathepsin L-like activities. *J. Neurochem.* 84: 533-545.

CHROMOSOMAL LOCATION

Genetic locus: MAG (human) mapping to 19q13.12.

PRODUCT

MAG (h): 293T Lysate represents a lysate of human MAG transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

MAG (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MAG antibodies. Recommended use: 10-20 µl per lane.

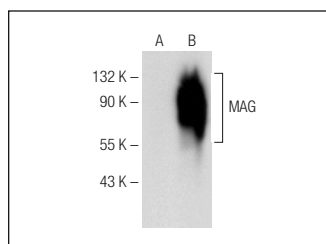
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MAG (D-7): sc-376145 is recommended as a positive control antibody for Western Blot analysis of enhanced human MAG expression in MAG transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

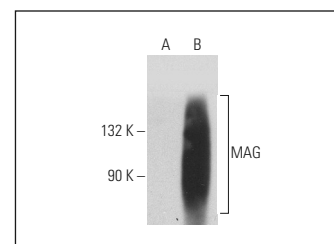
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



MAG (D-7): sc-376145. Western blot analysis of MAG expression in non-transfected: sc-117752 (A) and human MAG transfected: sc-116497 (B) 293T whole cell lysates.



MAG (A-11): sc-166849. Western blot analysis of MAG expression in non-transfected: sc-117752 (A) and human MAG transfected: sc-116497 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.