

MAB21L (A-7): sc-393017

BACKGROUND

MAB21L (mab-21-like 1), also known as CAGR1, is a 359 amino acid nuclear protein expressed in cerebellum and skeletal muscle. A member of the mab21 family, MAB21L is required for several aspects of embryonic development including normal development of the eye and cerebellum. MAB21L is similar to the MAB-21 cell fate-determining gene found in *Caenorhabditis elegans*, and it is suggested that the expansion of a trinucleotide repeat region in the 5' UTR of MAB21L may play a role in a variety of psychiatric disorders. MAB21L is encoded by a gene located on human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome. Trisomy 13, also known as Patau syndrome, is a deadly syndrome associated with chromosome 13. The few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

REFERENCES

1. Margolis, R.L., et al. 1999. Unstable expansion of the CAG trinucleotide repeat in MAB21L1: report of a second pedigree and effect on protein expression. *J. Med. Genet.* 36: 62-64.
2. Wong, R.L., et al. 1999. Developmental expression of Mab21l2 during mouse embryogenesis. *Mech. Dev.* 87: 185-188.
3. Wong, R.L. and Chow, K.L. 2002. Depletion of Mab21l1 and Mab21l2 messages in mouse embryo arrests axial turning, and impairs notochord and neural tube differentiation. *Teratology* 65: 70-77.

CHROMOSOMAL LOCATION

Genetic locus: MAB21L1 (human) mapping to 13q13.3, MAB21L2 (human) mapping to 4q31.3; Mab21l1 (mouse) mapping to 3 C, Mab21l2 (mouse) mapping to 3 F1.

SOURCE

MAB21L (A-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 176-214 within an internal region of MAB21L1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MAB21L (A-7) is available conjugated to agarose (sc-393017 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393017 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393017 PE), fluorescein (sc-393017 FITC), Alexa Fluor® 488 (sc-393017 AF488), Alexa Fluor® 546 (sc-393017 AF546), Alexa Fluor® 594 (sc-393017 AF594) or Alexa Fluor® 647 (sc-393017 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393017 AF680) or Alexa Fluor® 790 (sc-393017 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393017 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

MAB21L (A-7) is recommended for detection of MAB21L1 and MAB21L2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MAB21L (A-7) is also recommended for detection of MAB21L1 and MAB21L2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MAB21L siRNA (h): sc-75721, MAB21L siRNA (m): sc-149206, MAB21L shRNA Plasmid (h): sc-75721-SH, MAB21L shRNA Plasmid (m): sc-149206-SH, MAB21L shRNA (h) Lentiviral Particles: sc-75721-V and MAB21L shRNA (m) Lentiviral Particles: sc-149206-V.

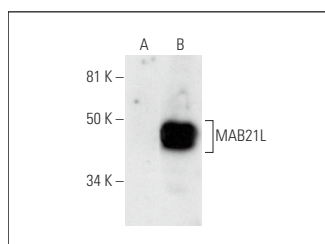
Molecular Weight of MAB21L: 38 kDa.

Positive Controls: MAB21L (h): 293T Lysate: sc-174549.

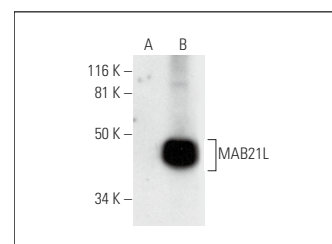
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MAB21L (A-7): sc-393017. Western blot analysis of MAB21L expression in non-transfected: sc-117752 (A) and human MAB21L transfected: sc-174549 (B) 293T whole cell lysates.



MAB21L (A-7): sc-393017. Western blot analysis of MAB21L expression in non-transfected: sc-117752 (A) and human MAB21L transfected: sc-114747 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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