

# MAGOH (N-17): sc-48240

## BACKGROUND

MAGOH, the human homolog of *Drosophila mago nashi*, is required for embryo development. MAGOH is ubiquitously expressed in adult tissues. It has an unusual structure consisting of an extremely flat, six-stranded anti-parallel  $\beta$  sheet packed next to two helices. MAGOH interacts with Y14 to form a complex that plays an crucial role in postsplicing processing (including nuclear export and cytoplasmic localization of the mRNA) and in the nonsense-mediated mRNA decay (NMD) surveillance process. The MAGOH-Y14 complex remains persistently associated in the same position on the mRNA after its export to the cytoplasm and requires translation of the mRNA for removal. This complex may illustrate the pre-mRNA splicing machinery's mechanism for forming a stable exon-exon junction complex-mRNA at splice junctions.

## REFERENCES

- Zhao, X.F., et al. 1998. The mammalian homolog of mago nashi encodes a serum-inducible protein. *Genomics* 47: 319-322.
- Zhao, X.F., et al. 2000. MAGOH interacts with a novel RNA-binding protein. *Genomics* 63: 145-148.
- Kataoka, N., et al. 2001. MAGOH, a human homolog of *Drosophila mago nashi* protein, is a component of the splicing-dependent exon-exon junction complex. *EMBO J.* 20: 6424-6433.
- Lau, C.K., et al. 2003. Structure of the MAGOH-Y14 core of the exon junction complex. *Curr. Biol.* 13: 933-941.
- Degot, S., et al. 2004. Association of the breast cancer protein MLN51 with the exon junction complex via its speckle localizer and RNA binding module. *J. Biol. Chem.* 279: 33702-33715.
- Nott, A., et al. 2004. Splicing enhances translation in mammalian cells: an additional function of the exon junction complex. *Genes Dev.* 18: 210-222.

## CHROMOSOMAL LOCATION

Genetic locus: MAGOH (human) mapping to 1p32.3, MAGOHB (human) mapping to 12p13.2; Magoh (mouse) mapping to 4 C7, Magohb (mouse) mapping to 6 C7.

## SOURCE

MAGOH (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MAGOH of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48240 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-48240 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

MAGOH (N-17) is recommended for detection of MAGOH and MAGOHB of human and mouse origin and MAGOH and LOC690303 of rat origin Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

MAGOH (N-17) is also recommended for detection of MAGOH and MAGOHB in additional species, including equine, canine, bovine, porcine and avian.

MAGOH (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

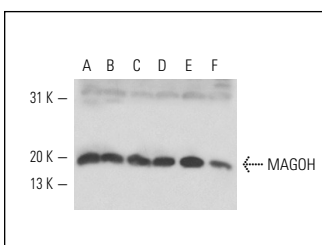
Molecular Weight of MAGOH: 17 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Raji whole cell lysate: sc-364236 or MAGOH (h): 293 Lysate: sc-113018.

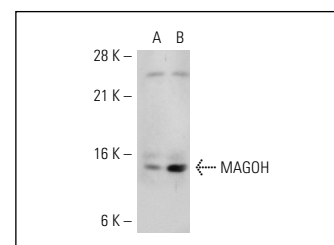
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



MAGOH (N-17): sc-48240. Western blot analysis of MAGOH expression in Ramos (A), BJAB (B), HeLa (C), HL-60 (D) and MOLT-4 (E) nuclear extracts and Raji whole cell lysate (F).



MAGOH (N-17): sc-48240. Western blot analysis of MAGOH expression in non-transfected: sc-110760 (A) and human MAGOH transfected: sc-113018 (B) 293 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.

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Try **MAGOH (21B12): sc-56724** or **MAGOH (F-6): sc-271365**, our highly recommended monoclonal alternatives to MAGOH (N-17).