SANTA CRUZ BIOTECHNOLOGY, INC.

MAGOH (F-6): sc-271365

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 β sheet packed next to two helices. MAGOH interacts with Y14 to form a com-plex that plays a crucial role in postsplicing processing (including nuclear export and cytoplasmic localization of the mRNA), as well as 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 mechanism of the pre-mRNA splicing machinery for forming a stable exon-exon junction com-plex-mRNA at splice junctions.

REFERENCES

1. Zhao, X.F., et al. 1998. The mammalian homolog of mago nashi encodes a serum-inducible protein. Genomics 47: 319-322.
2. Zhao, X.F., et al. 2000. MAGOH interacts with a novel RNA-binding protein. Genomics 63: 145-148.

CHROMOSOMAL LOCATION

Genetic locus: MAGOH (human) mapping to 1p32.3; Magoh (mouse) mapping to 4 C7.

SOURCE

MAGOH (F-6) is a mouse monoclonal antibody raised against amino acids 1-146 representing full length MAGOH of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain 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-271365 X, 200 µg/0.1 ml.

APPLICATIONS

MAGOH (F-6) is recommended for detection of MAGOH 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).

Suitable for use as control antibody for MAGOH siRNA (h): sc-60978, MAGOH siRNA (m): sc-60979, MAGOH shRNA Plasmid (h): sc-60978-SH, MAGOH shRNA Plasmid (m): sc-60979-SH, MAGOH shRNA (h) Lentiviral Particles: sc-60978-V and MAGOH shRNA (m) Lentiviral Particles: sc-60979-V.

MAGOH (F-6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

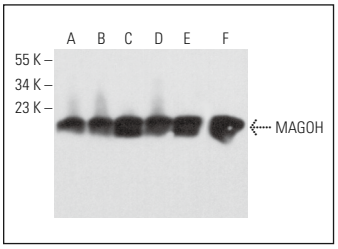
Molecular Weight of MAGOH: 17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or Raji whole cell lysate: sc-364236.

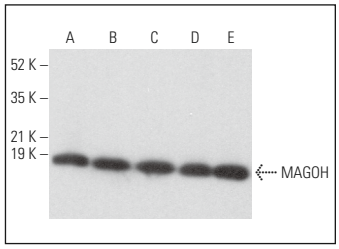
RECOMMENDED SUPPORT REAGENTS

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) Immunopre-cipitation: 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



MAGOH (F-6): sc-271365. Western blot analysis of MAGOH expression in PC-3 (**A**), HeLa (**B**), Jurkat (**C**), A-431 (**D**), K-562 (**E**) and Raji (**F**) whole cell lysates.



MAGOH (F-6): sc-271365. Western blot analysis of MAGOH expression in Raji (**A**), MOLT-4 (**B**) and BYDP (**C**) whole cell lysates and Ramos (**D**) and BJAB (**E**) nuclear

SELECT PRODUCT CITATIONS

1. Singh, K.K., et al. 2013. Two mammalian MAGOH genes contribute to exon junction complex composition and nonsense-mediated decay. RNA Biol. 10: 1291-1298.
2. Succoio, M., et al. 2015. Proteomic analysis reveals novel common genes modulated in both replicative and stress-induced senescence. J. Proteomics 128: 18-29.
3. Viswanathan, S.R., et al. 2018. Genome-scale analysis identifies paralog lethality as a vulnerability of chromosome 1p loss in cancer. Nat. Genet. 50: 937-943.
4. Mabin, J.W., et al. 2018. The exon junction complex undergoes a compo-sitional switch that alters mRNP structure and nonsense-mediated mRNA decay activity. Cell Rep. 25: 2431-2446.e7.
5. Gerbracht, J.V., et al. 2020. CASC3 promotes transcriptome-wide activation of nonsense-mediated decay by the exon junction complex. Nucleic Acids Res. 48: 8626-8644.

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.