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Goat Anti-MAGOH Antibody

Peptide-affinity purified goat antibody
Catalog # AF1646a

Specification

Goat Anti-MAGOH Antibody - Product Information

Application	**WB**
Primary Accession	P61326
Other Accession	NP_002361, 4116, 17149 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**17164**

Goat Anti-MAGOH Antibody - Additional Information

Gene ID 4116

Other Names
Protein mago nashi homolog, MAGOH, MAGOHA

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-MAGOH Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-MAGOH Antibody - Protein Information

Name MAGOH

Synonyms MAGOHA

Function
Required for pre-mRNA splicing as component of the spliceosome (PubMed:11991638). Plays a redundant role with MAGOHB as core component of the exon junction complex (EJC) and in the nonsense- mediated decay (NMD) pathway (PubMed:<a

href="http://www.uniprot.org/citations/23917022" target="_blank">23917022). The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. The EJC marks the position of the exon-exon junction in the mature mRNA for the gene expression machinery and the core components remain bound to spliced mRNAs throughout all stages of mRNA metabolism thereby influencing downstream processes including nuclear mRNA export, subcellular mRNA localization, translation efficiency and nonsense- mediated mRNA decay (NMD). The MAGOH-RBM8A heterodimer inhibits the ATPase activity of EIF4A3, thereby trapping the ATP-bound EJC core onto spliced mRNA in a stable conformation. The MAGOH-RBM8A heterodimer interacts with the EJC key regulator PYM1 leading to EJC disassembly in the cytoplasm and translation enhancement of EJC-bearing spliced mRNAs by recruiting them to the ribosomal 48S preinitiation complex. Involved in the splicing modulation of BCL2L1/Bcl-X (and probably other apoptotic genes); specifically inhibits formation of proapoptotic isoforms such as Bcl-X(S); the function is different from the established EJC assembly.

Cellular Location
Nucleus. Nucleus speckle. Cytoplasm. Note=Detected in granule-like structures in the dendroplasm (By similarity). Travels to the cytoplasm as part of the exon junction complex (EJC) bound to mRNA. Colocalizes with the core EJC, ALYREF/THOC4, NXF1 and UAP56 in the nucleus and nuclear speckles (PubMed:19324961). {ECO:0000250, ECO:0000250|UniProtKB:Q27W02, ECO:0000269|PubMed:19324961}

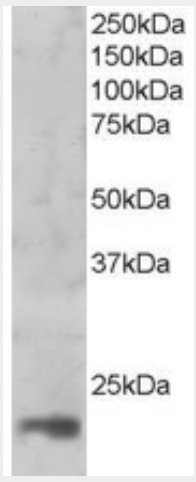
Tissue Location
Ubiquitous.

Goat Anti-MAGOH Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-MAGOH Antibody - Images



AF1646a (1ug/ml) staining of nuclear HeLa lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-MAGOH Antibody - Background

Drosophila that have mutations in their mago nashi (grandchildless) gene produce progeny with defects in germplasm assembly and germline development. This gene encodes the mammalian mago nashi homolog. In mammals, mRNA expression is not limited to the germ plasm, but is expressed ubiquitously in adult tissues and can be induced by serum stimulation of quiescent fibroblasts.

Goat Anti-MAGOH Antibody - References

Disassembly of exon junction complexes by PYM. Gehring NH, et al. Cell, 2009 May 1. PMID 19410547.
The exon-junction complex proteins, Y14 and MAGOH regulate STAT3 activation. Muromoto R, et al. Biochem Biophys Res Commun, 2009 Apr 24. PMID 19254694.
PYM binds the cytoplasmic exon-junction complex and ribosomes to enhance translation of spliced mRNAs. Diem MD, et al. Nat Struct Mol Biol, 2007 Dec. PMID 18026120.
Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.
Structure of the exon junction core complex with a trapped DEAD-box ATPase bound to RNA. Andersen CB, et al. Science, 2006 Sep 29. PMID 16931718.