10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MOV10 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP14933a

Specification

MOV10 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q9HCE1

MOV10 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 4343

Other Names
Putative helicase MOV-10, Moloney leukemia virus 10 protein, MOV10, KIAA1631

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MOV10 Antibody (N-term) Blocking Peptide - Protein Information

Name MOV10 (HGNC:7200)

Synonyms KIAA1631

Function
5' to 3' RNA helicase that is involved in a number of cellular roles ranging from mRNA metabolism and translation, modulation of viral infectivity, inhibition of retrotransposition, or regulation of synaptic transmission (PubMed:23093941). Plays an important role in innate antiviral immunity by promoting type I interferon production (PubMed:27016603, PubMed:35157734, PubMed:27974568). Mechanistically, specifically uses IKKepsilon/IKBKE as the mediator kinase for IRF3 activation (PubMed:27016603, PubMed:35157734). Blocks HIV-1 virus replication at a post-entry step (PubMed:20215113). Counteracts HIV-1 Vif-mediated degradation of APOBEC3G through its helicase activity by interfering with the ubiquitin-proteasome pathway (PubMed:29258557). Inhibits also hepatitis B virus/HBV replication by interacting with

HBV RNA and thereby inhibiting the early step of viral reverse transcription (PubMed:31722967). Contributes to UPF1 mRNA target degradation by translocation along 3' UTRs (PubMed:24726324). Required for microRNA (miRNA)-mediated gene silencing by the RNA-induced silencing complex (RISC). Required for both miRNA-mediated translational repression and miRNA-mediated cleavage of complementary mRNAs by RISC (PubMed:16289642, PubMed:17507929, PubMed:22791714). In cooperation with FMR1, regulates miRNA-mediated translational repression by AGO2 (PubMed:25464849). Restricts retrotransposition of long interspersed element-1 (LINE-1) in cooperation with TUT4 and TUT7 counteracting the RNA chaperonne activity of L1RE1 (PubMed:30122351, PubMed:23093941). Facilitates LINE-1 uridylation by TUT4 and TUT7 (PubMed:30122351). Required for embryonic viability and for normal central nervous system development and function. Plays two critical roles in early brain development: suppresses retroelements in the nucleus by directly inhibiting cDNA synthesis, while regulates cytoskeletal mRNAs to influence neurite outgrowth in the cytosol (By similarity). May function as a messenger ribonucleoprotein (mRNP) clearance factor (PubMed:24726324).

Cellular Location
Cytoplasm, P-body. Cytoplasm, Cytoplasmic ribonucleoprotein granule. Cytoplasm, Stress granule. Nucleus {ECO:0000250|UniProtKB:P23249} Cytoplasm {ECO:0000250|UniProtKB:P23249}. Note=Co-enriched in cytoplasmic foci with TUT4 (PubMed:30122351). In developing neurons, localizes both in nucleus and cytoplasm, but in the adulthood it is only cytoplasmic (By similarity). After infection, relocalizes to the DENV replication complex in perinuclear regions (PubMed:27974568) {ECO:0000250|UniProtKB:P23249, ECO:0000269|PubMed:27974568, ECO:0000269|PubMed:30122351}

MOV10 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

MOV10 Antibody (N-term) Blocking Peptide - Images

MOV10 Antibody (N-term) Blocking Peptide - Background

Probable RNA helicase. Required for RNA-mediated gene silencing by the RNA-induced silencing complex (RISC). Required for both miRNA-mediated translational repression and miRNA-mediated cleavage of complementary mRNAs by RISC. Also required for RNA-directed transcription and replication of the human hapatitis delta virus (HDV). Interacts with small capped HDV RNAs derived from genomic hairpin structures that mark the initiation sites of RNA-dependent HDV RNA transcription.

MOV10 Antibody (N-term) Blocking Peptide - References

El Messaoudi-Aubert, S., et al. Nat. Struct. Mol. Biol. 17(7):862-868(2010)Furtak, V., et al. PLoS ONE 5 (2), E9081 (2010) :Nakano, M., et al. Biochem. Biophys. Res. Commun. 388(2):328-332(2009)Haussecker, D., et al. Nat. Struct. Mol. Biol. 15(7):714-721(2008)Matsuoka, S., et al. Science 316(5828):1160-1166(2007)