

MOV10 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14933a**Specification**

MOV10 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O9HCE1](#)**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 InformationName 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](http://www.uniprot.org/citations/23093941)). Plays an important role in innate antiviral immunity by promoting type I interferon production (PubMed:[27016603](http://www.uniprot.org/citations/27016603), PubMed:[35157734](http://www.uniprot.org/citations/35157734), PubMed:[27974568](http://www.uniprot.org/citations/27974568)). Mechanistically, specifically uses IKKepsilon/IKBKE as the mediator kinase for IRF3 activation (PubMed:[27016603](http://www.uniprot.org/citations/27016603), PubMed:[35157734](http://www.uniprot.org/citations/35157734)). Blocks HIV-1 virus replication at a post-entry step (PubMed:[20215113](http://www.uniprot.org/citations/20215113)). Counteracts HIV-1 Vif-mediated degradation of APOBEC3G through its helicase activity by interfering with the ubiquitin-proteasome pathway (PubMed:[29258557](http://www.uniprot.org/citations/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 chaperone 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, relocates 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 hepatitis 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)