

MOV10 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14933a

Specification

MOV10 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P,E <u>O9HCE1</u> <u>NP_001123551.1</u>, <u>NP_066014.1</u> Human Rabbit Polyclonal Rabbit IgG 260-288

MOV10 Antibody (N-term) - Additional Information

Gene ID 4343

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

Target/Specificity This MOV10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 260-288 amino acids from the N-terminal region of human MOV10.

Dilution WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

MOV10 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MOV10 Antibody (N-term) - Protein Information

Name MOV10 (<u>HGNC:7200</u>)

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:<u>31722967</u>). 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:<u>30122351</u>). 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}

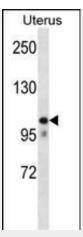
MOV10 Antibody (N-term) - Protocols

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

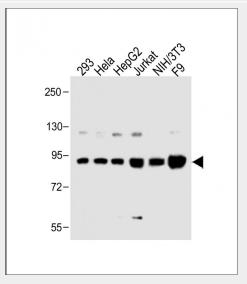
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MOV10 Antibody (N-term) - Images

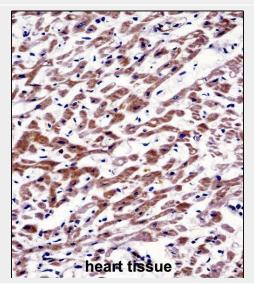




MOV10 Antibody (N-term) (Cat. #AP14933a) western blot analysis in human normal Uterus tissue lysates (35ug/lane).This demonstrates the MOV10 antibody detected the MOV10 protein (arrow).



All lanes : Anti-MOV10 Antibody (N-term) at 1:1000 dilution Lane 1: 293 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: Jurkat whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: F9 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 114 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





MOV10 Antibody (N-term) (AP14933a)immunohistochemistry analysis in formalin fixed and paraffin embedded human heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MOV10 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

MOV10 Antibody (N-term) - 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) - 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)