

MOV10 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14933a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9HCE1
Other Accession	NP_001123551.1 , NP_066014.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35508
Calculated MW	113671
Antigen Region	260-288

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~~1:100~500 E~~Use at an assay dependent concentration.
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.

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:[27974568](#), PubMed:[35157734](#)). 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](#)). Also inhibits 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:[23093941](#), PubMed:[30122351](#)). 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}

Background

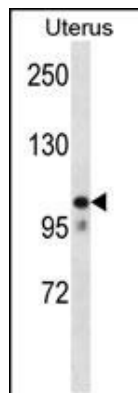
Probable RNA helicase. Required for RNA-mediated gene silencing by the RNA-induced silencing complex (RISC). Required for both miRNA-mediated translational repression and miRNA-mediated cleavage of complementary mRNAs by RISC. Also required for RNA-directed transcription and replication of the human 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.

References

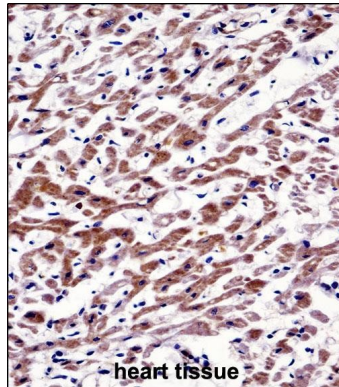
El Messaoudi-Aubert, S., et al. Nat. Struct. Mol. Biol. 17(7):862-868(2010) Furtak, V., et al. PLoS ONE 5 (2), E9081 (2010) : Nakano, M., et al. Biochem. Biophys. Res. Commun. 388(2):328-332(2009) Haussecker, D., et al. Nat. Struct. Mol. Biol. 15(7):714-721(2008) Matsuoka, S., et al. Science 316(5828):1160-1166(2007)

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).



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.

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