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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
Predicted	Rat, Bovine, Canine, Rabbit
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'-3' RNA helicase (PubMed: 24726324). 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 chaperonne 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}

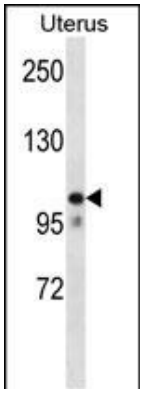
Background

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 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.

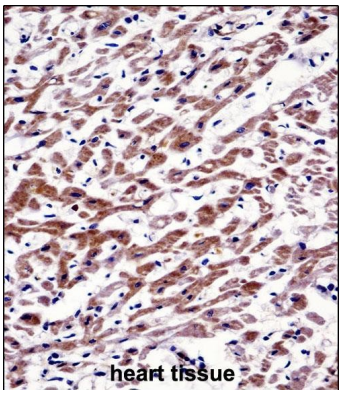
References

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.