MOV10 Antibody (N-term)<br>Affinity Purified Rabbit Polyclonall Antibody (Pab)<br>Catalog \# AP14933a

## Specification

MOV10 Antibody (N-term) - Product Information

```
Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Antigen Region
```

WB, IHC-P,E
Q9HCE1
NP 001123551.1, NP 066014.1
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 $2-8^{\circ} \mathrm{C}$ for up to 2 weeks. For long term storage store at $-20^{\circ} \mathrm{C}$ 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 (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). 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: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\}

## MOV10 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MOV10 Antibody (N-term) - Images

| Uterus |
| :---: |
| 250 |
| 130 |
| 95 |
| 72 |

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: $\mathrm{NIH} / 3 \mathrm{~T} 3$ whole cell lysate Lane 6: F9 whole cell lysate Lysates/proteins at $20 \mu \mathrm{~g}$ 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)

