

MOV10 Rabbit mAb

Catalog # AP76996

Product Information

Application WB, IHC-P **Primary Accession** Q9HCE1

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human Mov10

Purification Affinity Purified

Calculated MW 113671

Additional Information

Gene ID 4343

Other Names MOV10

Dilution WB~~1/500-1/1000 IHC-P~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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: <u>27974568</u>, PubMed: <u>35157734</u>). Mechanistically, specifically uses

IKKepsilon/IKBKE as the mediator kinase for IRF3 activation

(PubMed:<u>27016603</u>, PubMed:<u>35157734</u>). Blocks HIV-1 virus replication at a post-entry step (PubMed:<u>20215113</u>). Counteracts HIV-1 Vif-mediated

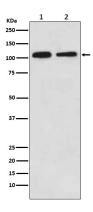
degradation of APOBEC3G through its helicase activity by interfering with the ubiquitin-proteasome pathway (PubMed: 29258557). Also inhibits hepatitis B virus/HBV replication by interacting with HBV RNA and thereby inhibiting the

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}

Images



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