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KD-Validated Anti-Mov10 RNA Helicase Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1614

Specification

KD-Validated Anti-Mov10 RNA Helicase Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q9HCE1
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 114 kDa , observed , 114 kDa KDa**
Gene Name	**MOV10**
Aliases	**Mov10 RNA Helicase; Mov10 RISC Complex RNA Helicase; FSAP113; Gb110; Functional Spliceosome-Associated Protein 113; Moloney Leukemia Virus 10 Protein; Armitage Homolog; Helicase MOV-10; MGC2948; Mov10, Moloney Leukemia Virus 10, Homolog (Mouse); Mov10 (Moloney Leukemia Virus 10, Mouse) Homolog; Mov10, Moloney Leukemia Virus 10, Homolog; Putative Helicase MOV-10; EC 3.6.4.13; KIAA1631; EC 3.6.1**
Immunogen	**A synthesized peptide derived from human Mov10**

KD-Validated Anti-Mov10 RNA Helicase Rabbit Monoclonal Antibody - Additional Information

Gene ID	**4343**

Other Names
Helicase MOV-10, 3.6.4.13, Armitage homolog, Moloney leukemia virus 10 protein, MOV10 (HGNC:7200), KIAA1631

KD-Validated Anti-Mov10 RNA Helicase Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/23093941"

target="_blank">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}

KD-Validated Anti-Mov10 RNA Helicase Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

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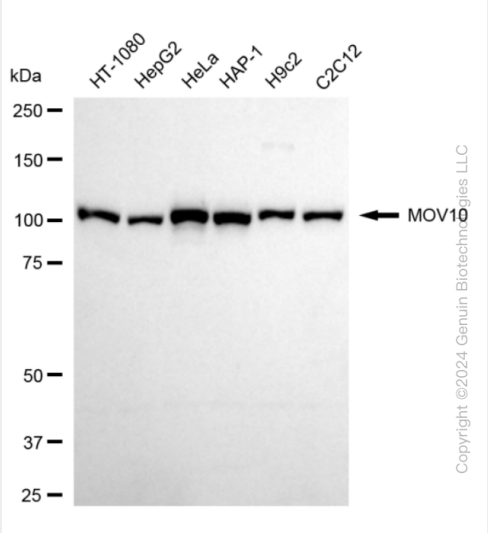
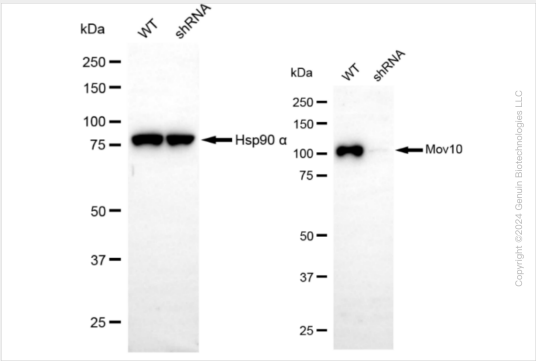
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Mov10 RNA Helicase Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-MOV10 antibody (Cat#AGI1614). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MOV10 antibody (Cat#AGI1614, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Mov10 antibody (Cat#AGI1614). Mov10 expression in wild type (WT) and Mov10 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Mov10 antibody (Cat#AGI1614, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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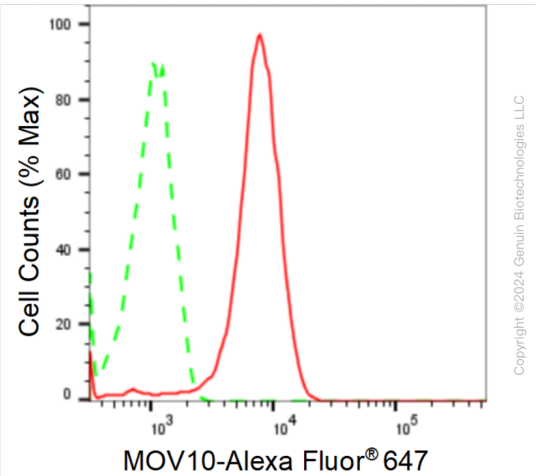
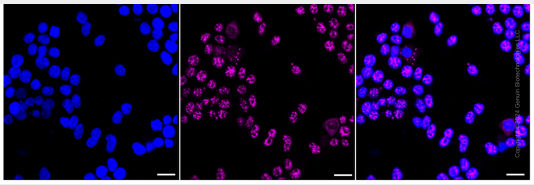


Flow cytometric analysis of MOV10 expression in Hela cells using anti-MOV10 antibody (Cat#AGI1614, 1:2,000). Green, isotype control; red, MOV10.



Immunocytochemical staining of HeLa cells with anti-MOV10 antibody (Cat#AGI1614, 1:1,000). Nuclei were stained blue with DAPI; MOV10 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.