

# MOV10 (E-15): sc-160530

## BACKGROUND

MOV10 (moloney leukemia virus 10), also known as putative helicase MOV10, gb110 or fSAP113, is a 1,003 amino acid novel telomerase-associated protein that belongs to the DNA2/NAM7 helicase family and SDE3 subfamily. Localizing to mRNA-degrading cytoplasmic P bodies, MOV10 may function as a RNA helicase that is required to mediate miRNA-guided mRNA cleavage and RNA-mediated gene silencing by the RISC (RNA-induced silencing) complex. Highly expressed in ovary and testis, MOV10 is involved in hepatitis  $\delta$  virus (HDV) transcription and replication, and is known to interact with eIF2C1, eIF2C2, eIF6, Dicer and TRBP2. MOV10 exists as three alternatively spliced isoforms that are encoded by a gene located on human chromosome 1 and mouse chromosome 3. Following translation, MOV10 may become phosphorylated upon DNA damage by either ATM or ATR.

## REFERENCES

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- Chendrimada, T.P., Finn, K.J., Ji, X., Baillat, D., Gregory, R.I., Liebhaber, S.A., Pasquinelli, A.E. and Shiekhattar, R. 2007. MicroRNA silencing through RISC recruitment of eIF6. *Nature* 447: 823-828.
- Matsuoka, S., Ballif, B.A., Smogorzewska, A., McDonald, E.R., Hurov, K.E., Luo, J., Bakalarski, C.E., Zhao, Z., Solimini, N., Lerenthal, Y., Shiloh, Y., Gygi, S.P. and Elledge, S.J. 2007. ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. *Science* 316: 1160-1166.
- Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610742. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Haussecker, D., Cao, D., Huang, Y., Parameswaran, P., Fire, A.Z. and Kay, M.A. 2008. Capped small RNAs and MOV10 in human hepatitis  $\delta$  virus replication. *Nat. Struct. Mol. Biol.* 15: 714-721.

## CHROMOSOMAL LOCATION

Genetic locus: MOV10 (human) mapping to 1p13.2; Mov10 (mouse) mapping to 3 F2.2.

## SOURCE

MOV10 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MOV10 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160530 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

MOV10 (E-15) is recommended for detection of MOV10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with MOV10L1.

MOV10 (E-15) is also recommended for detection of MOV10 in additional species, including equine, canine, bovine and porcine.

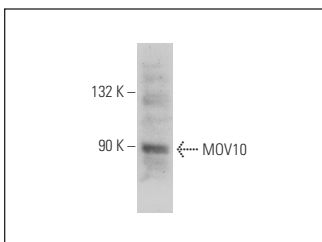
Suitable for use as control antibody for MOV10 siRNA (h): sc-88358, MOV10 siRNA (m): sc-149516, MOV10 shRNA Plasmid (h): sc-88358-SH, MOV10 shRNA Plasmid (m): sc-149516-SH, MOV10 shRNA (h) Lentiviral Particles: sc-88358-V and MOV10 shRNA (m) Lentiviral Particles: sc-149516-V.

Molecular Weight of MOV10: 110 kDa.

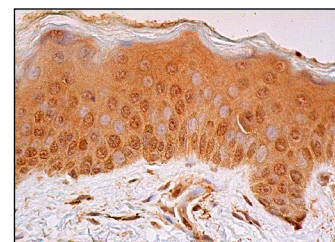
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



MOV10 (E-15): sc-160530. Western blot analysis of MOV10 expression in 293 whole cell lysate.



MOV10 (E-15): sc-160530. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic and nuclear staining of keratinocytes, fibroblasts, Langerhans cells and melanocytes.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.