

Med7 (H-17): sc-12457

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight coactivating complexes that mediate signals between transcriptional activators and RNA polymerase. These complexes include the SMCC (SRB and MED protein cofactor complex), which consists of various subunits that share homology with several components of the yeast transcriptional mediator complexes, and including the human proteins Srb7, Med6 (also designated DRIP33) and Med7 (also designated DRIP34). SMCC associates with the RNAPII (RNA polymerase II) holoenzyme through Srb7 and, in turn, enhances gene-specific activation or repression induced by DNA-binding transcription factors. Med6 and Med7, as well as other components of SMCC, associate with coactivator proteins from the TRAP (thyroid hormone receptor-activating protein) complex and DRIP (for vitamin D receptor interacting protein) complex to facilitate steroid receptor dependent transcriptional activation. Additionally, SMCC associates with PC4 (positive cofactor 4) to repress basal transcription independent of RNAPII activity.

REFERENCES

- Jiang, Y.W., et al. 1998. Mammalian mediator of transcriptional regulation and its possible role as an end-point of signal transduction pathways. *Proc. Natl. Acad. Sci. USA* 95: 8538-8543.
- Gu, W., et al. 1999. A novel human SRB/MED-containing cofactor complex, SMCC, involved in transcription regulation. *Mol. Cell* 3: 97-108.
- Xiao, H., et al. 1999. The human homologue of *Drosophila* TRF-proximal protein is associated with an RNA polymerase II-SRB complex. *J. Biol. Chem.* 274: 3937-3940.

CHROMOSOMAL LOCATION

Genetic locus: MED7 (human) mapping to 5q33.3; Med7 (mouse) mapping to 11 B1.1.

SOURCE

Med7 (H-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Med7 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-12457 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-12457 P, (100 µg 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.

RESEARCH USE

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

APPLICATIONS

Med7 (H-17) is recommended for detection of Med7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Med7 (H-17) is also recommended for detection of Med7 in additional species, including equine, canine, bovine and porcine.

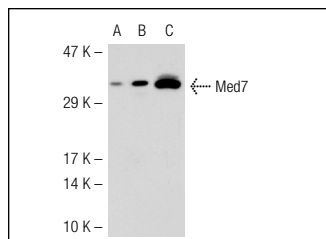
Suitable for use as control antibody for Med7 siRNA (h): sc-38581, Med7 siRNA (m): sc-38582, Med7 shRNA Plasmid (h): sc-38581-SH, Med7 shRNA Plasmid (m): sc-38582-SH, Med7 shRNA (h) Lentiviral Particles: sc-38581-V and Med7 shRNA (m) Lentiviral Particles: sc-38582-V.

Med7 (H-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

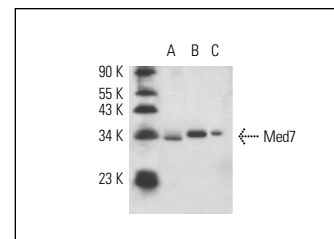
Molecular Weight of Med7: 27 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, A-673 nuclear extract: sc-2128 or Med7 (m): 293T Lysate: sc-125595.

DATA



Med7 (H-17): sc-12457. Western blot analysis of Med7 expression in non-transfected 293T: sc-117752 (A), mouse Med7 transfected 293T: sc-125595 (B) and A-673 (C) whole cell lysates.



Med7 (H-17): sc-12457. Western blot analysis of Med7 expression in HeLa (A), A-673 (B) and Jurkat (C) nuclear extracts.

SELECT PRODUCT CITATIONS

- Fong, Y.W., et al. 2011. A DNA repair complex functions as an oct4/sox2 coactivator in embryonic stem cells. *Cell* 147: 120-131.
- Lester, J.T., et al. 2011. Herpes simplex virus 1 ICP4 forms complexes with TFIID and mediator in virus-infected cells. *J. Virol.* 85: 5733-5744.

PROTOCOLS

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Try **Med7 (D-10): sc-393850** or **Med7 (E-4): sc-393210**, our highly recommended monoclonal alternatives to Med7 (H-17).