

Med6 (D-2): sc-390474

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 include 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

1. Malik, S., et al. 1998. A dynamic model for PC4 coactivator function in RNA polymerase II transcription. *Proc. Natl. Acad. Sci. USA* 95: 2192-2197.
2. 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.
3. Gu, W., et al. 1999. A novel human SRB/MED-containing cofactor complex, SMCC, involved in transcription regulation. *Mol. Cell* 3: 97-108.

CHROMOSOMAL LOCATION

Genetic locus: MED6 (human) mapping to 14q24.2; Med6 (mouse) mapping to 12 D1.

SOURCE

Med6 (D-2) is a mouse monoclonal antibody raised against amino acids 52-246 mapping at the C-terminus of Med6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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-390474 X, 200 µg/0.1 ml.

Med6 (D-2) is available conjugated to agarose (sc-390474 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390474 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390474 PE), fluorescein (sc-390474 FITC), Alexa Fluor[®] 488 (sc-390474 AF488), Alexa Fluor[®] 546 (sc-390474 AF546), Alexa Fluor[®] 594 (sc-390474 AF594) or Alexa Fluor[®] 647 (sc-390474 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390474 AF680) or Alexa Fluor[®] 790 (sc-390474 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

Med6 (D-2) is recommended for detection of Med6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

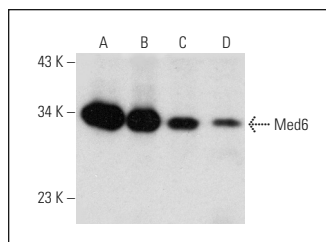
Suitable for use as control antibody for Med6 siRNA (h): sc-38580, Med6 siRNA (m): sc-149358, Med6 shRNA Plasmid (h): sc-38580-SH, Med6 shRNA Plasmid (m): sc-149358-SH, Med6 shRNA (h) Lentiviral Particles: sc-38580-V and Med6 shRNA (m) Lentiviral Particles: sc-149358-V.

Med6 (D-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

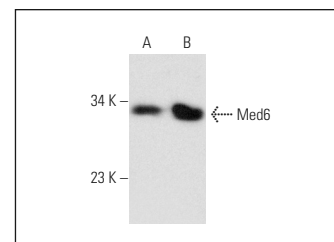
Molecular Weight of Med6: 33 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, NIH/3T3 nuclear extract: sc-2138 or A-431 nuclear extract: sc-2122.

DATA



Med6 (D-2): sc-390474. Western blot analysis of Med6 expression in Jurkat (A) and c4 (B) whole cell lysates and NIH/3T3 (C) and F9 (D) nuclear extracts.



Med6 (D-2): sc-390474. Western blot analysis of Med6 expression in A-431 (A) and Jurkat (B) nuclear extracts.

SELECT PRODUCT CITATIONS

1. Jaeger, M.G., et al. 2020. Selective mediator dependence of cell-type-specifying transcription. *Nat. Genet.* 52: 719-727.
2. Zhang, N., et al. 2020. MED13L integrates mediator-regulated epigenetic control into lung cancer radiosensitivity. *Theranostics* 10: 9378-9394.
3. Abderrahman, B., et al. 2021. Rapid induction of the unfolded protein response and apoptosis by estrogen mimic TTC-352 for the treatment of endocrine-resistant breast cancer. *Mol. Cancer Ther.* 20: 11-25.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.