SANTA CRUZ BIOTECHNOLOGY, INC.

Med6 (1D3): sc-134384

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

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2. Jiang, Y.W., Veschambre, P., Erdjument-Bromage, H., Tempst, P., Conaway, J.W., Conaway, R.C. and Kornberg, R.D. 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.
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4. Ito, M., Yuan, C.X., Malik, S., Gu, W., Fondell, J.D., Yamamura, S., Fu, Z.Y., Zhang, X., Qin, J. and Roeder, R.G. 1999. Identity between TRAP and SMCC complexes indicates novel pathways for the function of nuclear receptors and diverse mammalian activators. Mol. Cell 3: 361-370.
5. Xiao, H., Tao, Y. and Roeder, R.G. 1999. The human homologue of *Drosophila* TRF-proximal protein is associated with an RNA polymerase II-SRB complex. J. Biol. Chem. 274: 3937-3940.
6. Rachez, C., Lemon, B.D., Suldan, Z., Bromleigh, V., Gamble, M., Naar, A.M., Erdjument-Bromage, H., Tempst, P. and Freedman, L.P. 1999. Ligand-dependent transcription activation by nuclear receptors requires the DRIP complex. Nature 398: 824-828.

CHROMOSOMAL LOCATION

Genetic locus: MED6 (human) mapping to 14q24.2.

SOURCE

Med6 (1D3) is a mouse monoclonal antibody raised against recombinant Med6 protein of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Med6 (1D3) is recommended for detection of Med6 of 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)] 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 shRNA Plasmid (h): sc-38580-SH and Med6 shRNA (h) Lentiviral Particles: sc-38580-V.

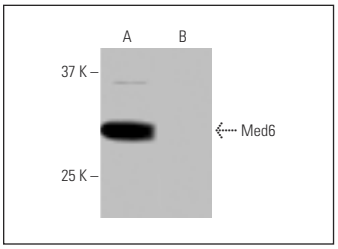
Molecular Weight of Med6: 33 kDa.

Positive Controls: A-431 nuclear extract: sc-2122, human Med6 transfected 293T whole cell lysate or Jurkat nuclear extract: sc-2132.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Med6 (1D3): sc-134384. Western blot analysis of Med6 expression in human Med6 transfected (**A**) and non-transfected (**B**) 293T whole cell lysates.

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.

PROTOCOLS

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