SANTA CRUZ BIOTECHNOLOGY, INC.

Med6 (E-20): sc-9433

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

Med6 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Med6 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-9433 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-9433 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Med6 (E-20) 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)], 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).

Med6 (E-20) is also recommended for detection of Med6 in additional species, including equine, canine, bovine and porcine.

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.

Med6 (E-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

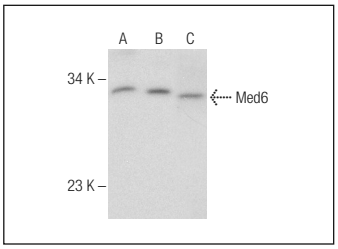
Molecular Weight of Med6: 33 kDa.

Positive Controls: A-431 nuclear extract: sc-2122.

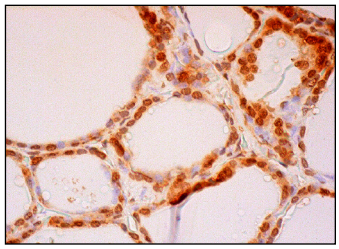
STORAGE

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

DATA



Med6 (E-20): sc-9433. Western blot analysis of Med6 expression in A-431 (**A**), Jurkat (**B**) and Ramos (**C**) nuclear extracts.



Med6 (E-20): sc-9433. Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid gland tissue showing nuclear staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Johnson, K.M., et al. 2002. TFIID and human mediator coactivator complexes assemble cooperatively on promoter DNA. Genes Dev. 16: 1852-1863.
2. Sato, S., et al. 2003. A mammalian homolog of *Drosophila melanogaster* transcriptional coactivator intersex is a subunit of the mammalian mediator complex. J. Biol. Chem. 278: 49671-49674.
3. Tomomori-Sato, C., et al. 2004. A mammalian mediator subunit that shares properties with *Saccharomyces cerevisiae* mediator subunit Cse2. J. Biol. Chem. 279: 5846-5851.
4. Rovnak, J., et al. 2005. An activation domain within the walleye dermal sarcoma virus retroviral cyclin protein is essential for inhibition of the viral promoter. Virology 342: 240-251.
5. Kim, S. and Xu, X. 2006. Mediator is a transducer of Wnt/β-catenin signaling. J. Biol. Chem. 281: 14066-14075.
6. Zhou, H, et al. 2006. Mediator modulates Gli3-dependent sonic hedgehog signaling. Mol. Cell. Biol. 26: 8667-8682.
7. Sela, D., et al. 2012. Endoplasmic reticulum stress-responsive transcription factor ATF6α directs recruitment of the mediator of RNA polymerase II transcription and multiple histone acetyltransferase complexes. J. Biol. Chem. 287: 23035-23045.

RESEARCH USE

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