SANTA CRUZ BIOTECHNOLOGY, INC.

Med6 (C-16): sc-9434

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 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.

CHROMOSOMAL LOCATION

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

SOURCE

Med6 (C-16) 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-9434 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-9434 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Med6 (C-16) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Med6 (C-16) is also recommended for detection of Med6 in additional species, including equine and bovine.

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 (C-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

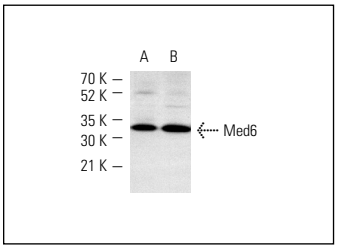
Molecular Weight of Med6: 33 kDa.

Positive Controls: A-431 nuclear extract: sc-2122 or Jurkat nuclear extract: sc-2132.

STORAGE

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

DATA



Med6 (C-16): sc-9434. Western blot analysis of Med6 expression in A-431 (**A**) and Jurkat (**B**) nuclear extracts.

SELECT PRODUCT CITATIONS

1. Tsutsui, T., et al. 2008. Human mediator kinase subunit Cdk11 plays a negative role in viral activator VP16-dependent transcriptional regulation. Genes Cells 13: 817-826.
2. Belakavadi, M., et al. 2008. Med1 phosphorylation promotes its association with mediator: implications for nuclear receptor signaling. Mol. Cell. Biol. 28: 3932-3942.
3. Le May, N., et al. 2010. NER factors are recruited to active promoters and facilitate chromatin modification for transcription in the absence of exogenous genotoxic attack. Mol. Cell 38: 54-66.
4. Esposito, G., et al. 2011. Protein network study of human AF4 reveals its central role in RNA Pol II-mediated transcription and in phosphorylation-dependent regulatory mechanisms. Biochem. J. 438: 121-131.
5. Verger, A., et al. 2013. The Mediator complex subunit MED25 is targeted by the N-terminal transactivation domain of the PEA3 group members. Nucleic Acids Res. 41: 4847-4859.
6. Tsutsui, T., et al. 2013. Mediator complex recruits epigenetic regulators via its two cyclin-dependent kinase subunits to repress transcription of immune response genes. J. Biol. Chem. 288: 20955-20965.

RESEARCH USE

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

PROTOCOLS

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