SANTA CRUZ BIOTECHNOLOGY, INC.

Med8 (G-14): sc-103620

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight co-activating complexes that mediate signals between transcriptional activators and RNA polymerase II (Pol II). The mediator complex is one such multiprotein structure that functions as a bridge between regulatory proteins and Pol II, thereby regulating Pol II-dependent transcription. Med8 (mediator complex subunit 8), also known as arc32 (activator-recruited cofactor 32 kDa component), is a 268 amino acid protein that localizes to the nucleus and exists as a component of the mediator complex. Involved in the pathway of protein modification and ubiquitination, Med8 is involved in transcriptional regulation and may also recruit E3 ubiquitin-protein ligase complexes to proteins targeted for proteasomal degradation. Multiple isoforms of Med8 exist due to alternative splicing events.

REFERENCES

1. 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.
2. Näär, A.M., et al. 1999. Composite co-activator ARC mediates chromatin-directed transcriptional activation. Nature 398: 828-832.
3. Brower, C.S., et al. 2002. Mammalian mediator subunit mMed8 is an Elongin BC-interacting protein that can assemble with CUL-2 and Rbx1 to reconstitute a ubiquitin ligase. Proc. Natl. Acad. Sci. USA 99: 10353-10358.
4. Sato, S., et al. 2003. Identification of mammalian Mediator subunits with similarities to yeast Mediator subunits Srb5, Srb6, Med11, and Rox3. J. Biol. Chem. 278: 15123-15127.
5. 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.
6. 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.

CHROMOSOMAL LOCATION

Genetic locus: MED8 (human) mapping to 1p34.2; Med8 (mouse) mapping to 4 D2.1.

SOURCE

Med8 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Med8 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.

Blocking peptide available for competition studies, sc-103620 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Med8 (G-14) is recommended for detection of Med8 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); non cross-reactive with other Med family members.

Med8 (G-14) is also recommended for detection of Med8 in additional species, including canine.

Suitable for use as control antibody for Med8 siRNA (h): sc-88195, Med8 siRNA (m): sc-149359, Med8 shRNA Plasmid (h): sc-88195-SH, Med8 shRNA Plasmid (m): sc-149359-SH, Med8 shRNA (h) Lentiviral Particles: sc-88195-V and Med8 shRNA (m) Lentiviral Particles: sc-149359-V.

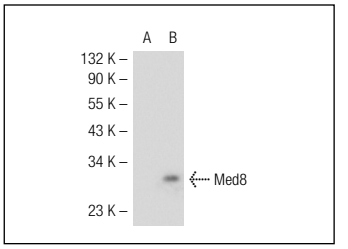
Molecular Weight of Med8: 29 kDa.

Positive Controls: Med8 (m): 293T Lysate: sc-125596 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Med8 (G-14): sc-103620. Western blot analysis of Med8 expression in non-transfected: sc-117752 (**A**) and mouse Med8 transfected: sc-125596 (**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.

PROTOCOLS

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