Med18 (E-14): sc-161835



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. Med18 (mediator complex subunit 18), also known asp28b, is a 208 amino acid protein that localizes to nucleus and exists as a component of the mediator complex. Working in tandem with several other proteins, including Med8 and Med25, Med18 serves as a scaffold for the assembly of a functional preinitiation complex with Pol II and general transcription factors, thereby activating the transcription of Pol II-dependent genes.

REFERENCES

- 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.
- Rachez, C., Lemon, B.D., Suldan, Z., Bromleigh, V., Gamble, M., Näär, A.M., Erdjument-Bromage, H., Tempst, P. and Freedman, L.P. 1999. Liganddependent transcription activation by nuclear receptors requires the DRIP complex. Nature 398: 824-828.
- Sato, S., Tomomori-Sato, C., Banks, C.A., Sorokina, I., Parmely, T.J., Kong, S.E., Jin, J., Cai, Y., Lane, W.S., Brower, C.S., Conaway, R.C. and Conaway, J.W. 2003. Identification of mammalian mediator subunits with similarities to yeast mediator subunits Srb5, Srb6, Med11, and Rox3. J. Biol. Chem. 278: 15123-15127.
- Sato, S., Tomomori-Sato, C., Banks, C.A., Parmely, T.J., Sorokina, I., Brower, C.S., Conaway, R.C. and Conaway, J.W. 2003. A mammalian homolog of *Drosophila melanogaster* transcriptional coactivator intersex is a subunit of the mammalian mediator complex. J. Biol. Chem. 278: 49671-49674.
- Tomomori-Sato, C., Sato, S., Parmely, T.J., Banks, C.A., Sorokina, I., Florens, L., Zybailov, B., Washburn, M.P., Brower, C.S., Conaway, R.C. and Conaway, J.W. 2004. A mammalian mediator subunit that shares properties with *Saccharomyces cerevisiae* mediator subunit Cse2. J. Biol. Chem. 279: 5846-5851.
- Sato, S., Tomomori-Sato, C., Parmely, T.J., Florens, L., Zybailov, B., Swanson, S.K., Banks, C.A., Jin, J., Cai, Y., Washburn, M., Conaway, J. and Conaway, R.C. 2004. A set of consensus mammalian mediator subunits identified by multidimensional protein identification technology. Mol. Cell 14: 685-691.
- 7. Conaway, J.W., Florens, L., Sato, S., Tomomori-Sato, C., Parmely, T.J., Yao, T., Swanson, S.K., Banks, C.A., Washburn, M.P. and Conaway, R.C. 2005. The mammalian mediator complex. FEBS Lett. 579: 904-908.
- 8. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612384. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: MED18 (human) mapping to 1p35.3; Med18 (mouse) mapping to 4 D2.3.

SOURCE

Med18 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Med18 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-161835 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Med18 (E-14) is recommended for detection of Med18 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

Med18 (E-14) is also recommended for detection of Med18 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Med18 siRNA (h): sc-88848, Med18 siRNA (m): sc-149349, Med18 shRNA Plasmid (h): sc-88848-SH, Med18 shRNA Plasmid (m): sc-149349-SH, Med18 shRNA (h) Lentiviral Particles: sc-88848-V and Med18 shRNA (m) Lentiviral Particles: sc-149349-V.

Molecular Weight of Med18: 24 kDa.

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) 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.

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.



Try **Med18 (E-4): sc-514415**, our highly recommended monoclonal alternative to Med18 (E-14).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com