SANTA CRUZ BIOTECHNOLOGY, INC.

TRAP95 (N-16): sc-5366

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight coactivating complexes that mediate signaling between transcriptional activators and initiation factors. These complexes include the thyroid hormone receptor-associated protein (TRAP) complex, which interacts with thyroid receptors (TR), vitamin D receptors and other steroid receptors to facilitate hormone induced transcriptional activation. The TRAP complex consists of numerous proteins ranging in size including TRAP95, TRAP100, TRAP150, TRAP220 and TRAP230, and they are characterized by the presence of a nuclear receptor recognition motif, which mediates the ligand-dependent binding of TRAP proteins to the nuclear receptors. TRAP220 and TRAP100 are widely expressed and most abundantly detected in skeletal muscle, heart and placenta. TRAP95, TRAP150 and TRAP230 facilitate TR-induced transcription by associating with an additional transcriptional coactivating complex SMCC (SRB and MED protein cofactor complex), which consists of various subunits that share homology with several components of the yeast transcriptional mediator complexes.

REFERENCES

1. Yuan, C.X., et al. 1998. The TRAP220 component of a thyroid hormone receptor-associated protein (TRAP) coactivator complex interacts directly with nuclear receptors in a ligand-dependent fashion. Proc. Natl. Acad. Sci. USA 95: 7939-7944.
2. 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.
3. Treuter, E., et al. 1999. Competition between thyroid hormone receptor-associated protein (TRAP) 220 and transcriptional intermediary factor (TIF) 2 for binding to nuclear receptors. Implications for the recruitment of TRAP and p160 coactivator complexes. J. Biol. Chem. 274: 6667-6677.
4. Kumar, R., et al. 1999. The structure of the nuclear hormone receptors. Steroids 64: 310-319.
5. Zhang, J., et al. 1999. Identification of mouse TRAP100: a transcriptional coregulatory factor for thyroid hormone and vitamin D receptors. Mol. Endocrinol. 13: 1130-1140.
6. Gu, W., et al. 1999. A novel human SRB/MED-containing cofactor complex, SMCC, involved in transcription regulation. Mol. Cell 3: 97-108.

CHROMOSOMAL LOCATION

Genetic locus: MED16 (human) mapping to 19p13.3.

SOURCE

TRAP95 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TRAP95 of human origin.

STORAGE

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

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-5366 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-5366 X, 200 µg/0.1 ml.

APPLICATIONS

TRAP95 (N-16) is recommended for detection of TRAP95 of 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).

Suitable for use as control antibody for TRAP95 siRNA (h): sc-38587, TRAP95 shRNA Plasmid (h): sc-38587-SH and TRAP95 shRNA (h) Lentiviral Particles: sc-38587-V.

TRAP95 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TRAP95: 97 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

SELECT PRODUCT CITATIONS

1. Gwack, Y., et al. 2003. Principal role of TRAP/mediator and SWI/SNF complexes in Kaposi's sarcoma-associated herpesvirus RTA-mediated lytic reactivation. Mol. Cell. Biol. 23: 2055-2067.
2. Kim, S., et al. 2006. Mediator is a transducer of Wnt/β-catenin signaling. J. Biol. Chem. 281: 14066-14075.
3. Ding, N., et al. 2008. Mediator links epigenetic silencing of neuronal gene expression with x-linked mental retardation. Mol. Cell 31: 347-359.
4. Ding, N., et al. 2009. Med19 and Med26 are synergistic functional targets of the RE1 silencing transcription factor in epigenetic silencing of neuronal gene expression. J. Biol. Chem. 284: 2648-2656.

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.