SANTA CRUZ BIOTECHNOLOGY, INC.

TRAP95 (F83): sc-130439

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

TRAP95 (F83) is a mouse monoclonal antibody raised against recombinant TRAP95 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

TRAP95 (F83) is recommended for detection of TRAP95 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

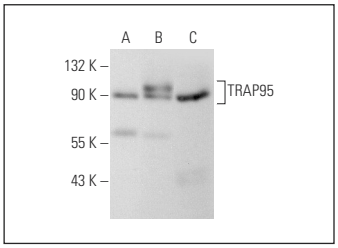
Molecular Weight of TRAP95: 97 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or TRAP95 (h): 293T Lysate: sc-175381.

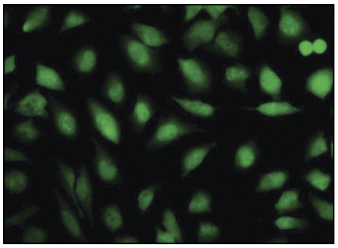
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TRAP95 (F83): sc-130439. Western blot analysis of TRAP95 expression in non-transfected: sc-117752 (**A**) and human TRAP95 transfected: sc-175381 (**B**) 293T whole cell lysates and HeLa nuclear extract (**C**).



TRAP95 (F83): sc-130439. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Vijayalingam, S. and Chinnadurai, G. 2013. Adenovirus L-E1A activates transcription through mediator complex-dependent recruitment of the super elongation complex. J. Virol. 87: 3425-3434.

RESEARCH USE

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

PROTOCOLS

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