SANTA CRUZ BIOTECHNOLOGY, INC.

TRAP230 (E-2): sc-515695

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, that 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. 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. Zhang, J. and Fondell, J.D. 1999. Identification of mouse TRAP100: a transcriptional coregulatory factor for thyroid hormone and vitamin D receptors. Mol. Endocrinol.13: 1130-1140.
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.

CHROMOSOMAL LOCATION

Genetic locus: MED12 (human) mapping to Xq13.1; Med12 (mouse) mapping to X D.

SOURCE

TRAP230 (E-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1974-1997 within an internal region of TRAP230 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 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-515695 X, 200 µg/0.1 ml.

TRAP230 (E-2) is available conjugated to agarose (sc-515695 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515695 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515695 PE), fluorescein (sc-515695 FITC), Alexa Fluor® 488 (sc-515695 AF488), Alexa Fluor® 546 (sc-515695 AF546), Alexa Fluor® 594 (sc-515695 AF594) or Alexa Fluor® 647 (sc-515695 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515695 AF680) or Alexa Fluor® 790 (sc-515695 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

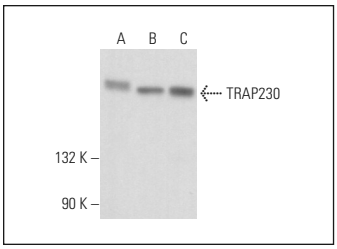
TRAP230 (E-2) is recommended for detection of TRAP230 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TRAP230 siRNA (h): sc-38595, TRAP230 siRNA (m): sc-38596, TRAP230 shRNA Plasmid (h): sc-38595-SH, TRAP230 shRNA Plasmid (m): sc-38596-SH, TRAP230 shRNA (h) Lentiviral Particles: sc-38595-V and TRAP230 shRNA (m) Lentiviral Particles: sc-38596-V.

TRAP230 (E-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: K-562 nuclear extract: sc-2130, HeLa whole cell lysate: sc-2200 or 3T3-L1 cell lysate: sc-2243.

DATA



TRAP230 (E-2): sc-515695. Western blot analysis of TRAP230 expression in K-562 nuclear extract (**A**) and HeLa (**B**) and 3T3-L1 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Schleicher, E.M., et al. 2020. Dual genome-wide CRISPR knockout and CRISPR activation screens identify mechanisms that regulate the resistance to multiple ATR inhibitors. PLoS Genet. 16: e1009176.
2. Jackson, L.M., et al. 2021. Loss of MED12 activates the TGFβ pathway to promote chemoresistance and replication fork stability in BRCA-deficient cells. Nucleic Acids Res. 49: 12855-12869.
3. Terabayashi, T. and Hashimoto, S. 2021. Increased unfolded protein responses caused by MED17 mutations. Neurogenetics 22: 353-357.

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.