SANTA CRUZ BIOTECHNOLOGY, INC.

TRAP240 (E-12): sc-515557

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. 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.

CHROMOSOMAL LOCATION

Genetic locus: MED13 (human) mapping to 17q23.2; Med13 (mouse) mapping to 11 C.

SOURCE

TRAP240 (E-12) is a mouse monoclonal antibody raised against amino acids 476-775 mapping within an internal region of TRAP240 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRAP240 (E-12) is available conjugated to agarose (sc-515557 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515557 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515557 PE), fluorescein (sc-515557 FITC), Alexa Fluor® 488 (sc-515557 AF488), Alexa Fluor® 546 (sc-515557 AF546), Alexa Fluor® 594 (sc-515557 AF594) or Alexa Fluor® 647 (sc-515557 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515557 AF680) or Alexa Fluor® 790 (sc-515557 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

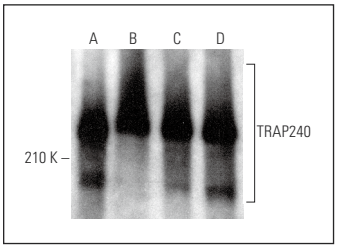
APPLICATIONS

TRAP240 (E-12) is recommended for detection of TRAP240 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).

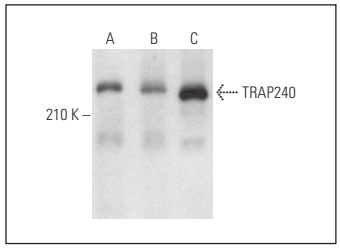
Suitable for use as control antibody for TRAP240 siRNA (h): sc-38597, TRAP240 siRNA (m): sc-154584, TRAP240 shRNA Plasmid (h): sc-38597-SH, TRAP240 shRNA Plasmid (m): sc-154584-SH, TRAP240 shRNA (h) Lentiviral Particles: sc-38597-V and TRAP240 shRNA (m) Lentiviral Particles: sc-154584-V.

Positive Controls: T98G cell lysate: sc-2294, HEK293T whole cell lysate: sc-45137 or Jurkat nuclear extract: sc-2132.

DATA



TRAP240 (E-12): sc-515557. Western blot analysis of TRAP240 expression in Jurkat nuclear extract (**A**) and HeLa (**B**), MCF7 (**C**) and NIH/3T3 (**D**) whole cell lysates.



TRAP240 (E-12): sc-515557. Western blot analysis of TRAP240 expression in T98G (**A**) and HEK293T (**B**) whole cell lysates and Jurkat nuclear extract (**C**).

SELECT PRODUCT CITATIONS

1. Steinparzer, I., et al. 2019. Transcriptional responses to IFN-γ require mediator kinase-dependent pause release and mechanistically distinct CDK8 and CDK19 functions. Mol. Cell 76: 485.e8-499.e8.
2. Stieg, D.C., et al. 2020. The extent of cyclin C promoter occupancy directs changes in stress-dependent transcription. J. Biol. Chem. 295: 16280-16291.
3. Ren, M., et al. 2022. MED13 and glycolysis are conserved modifiers of α-synuclein-associated neurodegeneration. Cell Rep. 41: 111852.

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.