SANTA CRUZ BIOTECHNOLOGY, INC.

TRAP220 (H-7): sc-74475

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight co-activating 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 co-activating 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.

CHROMOSOMAL LOCATION

Genetic locus: MED1 (human) mapping to 17q12; Med1 (mouse) mapping to 11 D.

SOURCE

TRAP220 (H-7) is a mouse monoclonal antibody raised against amino acids 502-756 of TRAP220 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain 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-74475 X, 200 µg/0.1 ml.

TRAP220 (H-7) is available conjugated to agarose (sc-74475 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-74475 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74475 PE), fluorescein (sc-74475 FITC), Alexa Fluor® 488 (sc-74475 AF488), Alexa Fluor® 546 (sc-74475 AF546), Alexa Fluor® 594 (sc-74475 AF594) or Alexa Fluor® 647 (sc-74475 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-74475 AF680) or Alexa Fluor® 790 (sc-74475 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.

PROTOCOLS

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

APPLICATIONS

TRAP220 (H-7) is recommended for detection of TRAP220 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

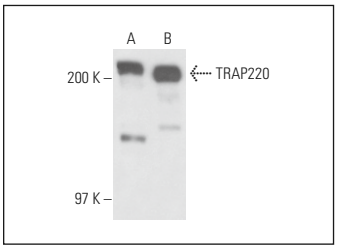
Suitable for use as control antibody for TRAP220 siRNA (h): sc-38593, TRAP220 siRNA (m): sc-38594, TRAP220 shRNA Plasmid (h): sc-38593-SH, TRAP220 shRNA Plasmid (m): sc-38594-SH, TRAP220 shRNA (h) Lentiviral Particles: sc-38593-V and TRAP220 shRNA (m) Lentiviral Particles: sc-38594-V.

TRAP220 (H-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

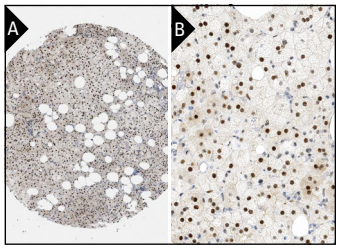
Molecular Weight of TRAP220: 220 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Sol8 cell lysate: sc-2249 or Jurkat whole cell lysate: sc-2204.

DATA



TRAP220 (H-7): sc-74475. Western blot analysis of TRAP220 expression in Jurkat (**A**) and Sol8 (**B**) whole cell lysates.



TRAP220 (H-7): sc-74475. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing nuclear staining of cortical cells at low (**A**) and high (**B**) magnifications. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

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.
2. Offermann, A., et al. 2017. MED15 overexpression in prostate cancer arises during androgen deprivation therapy via PI3K/mTOR signaling. Oncotarget 8: 7964-7976.
3. Tang, W.S., et al. 2021. The mediator subunit MED20 organizes the early adipogenic complex to promote development of adipose tissues and diet-induced obesity. Cell Rep. 36: 109314.
4. Infantino, R., et al. 2022. MED1/BDNF/TrkB pathway is involved in thalamic hemorrhage-induced pain and depression by regulating microglia. Neurobiol. Dis. 164: 105611.

RESEARCH USE

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