SANTA CRUZ BIOTECHNOLOGY, INC.

TRRAP (T-17): sc-5405

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The transcription factors c-Myc and E2F are involved in regulating cell cycle progression. Overexpression of c-Myc in certain cell types induces non-cycling cells to enter the cell cycle via a mechanism involving E2F-1. E2F-1 is thought to regulate c-Myc expression via interactions with the retinoblastoma protein. TRRAP (for transformation/transcription domain-associated protein) interacts specifically with both c-Myc and E2F-1. Expression of *trans*-activated mutant TRRAP inhibits the oncogenic transformation of both c-Myc and E2F-1, suggesting that TRRAP is required for these oncogenic transcription factor pathways. TRRAP shares homology with the ATM/PI 3-kinase family, and it is highly conserved in evolution.

CHROMOSOMAL LOCATION

Genetic locus: TRRAP (human) mapping to 7q22.1; Trrap (mouse) mapping to 5 G2.

SOURCE

TRRAP (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRRAP of human origin.

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-5405 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRRAP (T-17) is recommended for detection of TRRAP of mouse, rat and 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)], 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).

TRRAP (T-17) is also recommended for detection of TRRAP in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for TRRAP siRNA (h): sc-36746, TRRAP siRNA (m): sc-36747, TRRAP shRNA Plasmid (h): sc-36746-SH, TRRAP shRNA Plasmid (m): sc-36747-SH, TRRAP shRNA (h) Lentiviral Particles: sc-36746-V and TRRAP shRNA (m) Lentiviral Particles: sc-36747-V.

Molecular Weight of TRRAP: 434 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, K-562 nuclear extract: sc-2130 or Jurkat nuclear extract: sc-2132.

RESEARCH USE

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

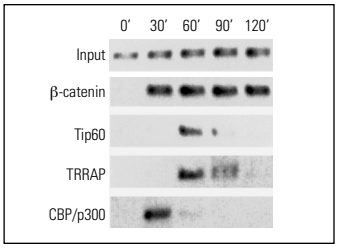
PROTOCOLS

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

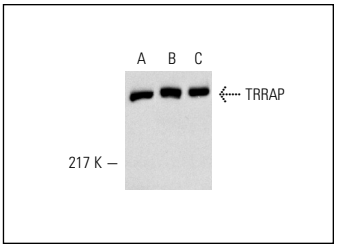
STORAGE

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

DATA



ChIP analysis of coactivator recruitment on Cyclin D2 promoter in C2C12 cells treated with LiCl and serum. Antibodies tested include β-catenin (H-102): sc-7199, β-catenin (C-18): sc-1496, β-catenin (E-5): sc-7963, Tip60 (N-17): sc-5725, TRRAP (T-17): sc-5405, TRRAP (Y-18): sc-12375, TRRAP (F-20): sc-12376, TRRAP (H-300): sc-11411, CBP (A-22): sc-369, CBP (C-20): sc-583, CBP (451): sc-1211, CPB (C-1): sc-7300, p300 (H-272): sc-8981, p300 (N-15): sc-584 and p300 (C-20): sc-585. Data kindly provided by M.G. Rosenfeld and reproduced with permission from Kioussi et al., Cell 2002, 111: 673-685.



TRRAP (T-17): sc-5405. Western blot analysis of TRRAP expression in HeLa (**A**), K-562 (**B**) and Jurkat (**C**) nuclear extracts.

SELECT PRODUCT CITATIONS

1. Lang, S., et al. 2001. E2F transcriptional activation requires TRRAP and GCN5 cofactors. J. Biol. Chem. 276: 32627-32634.
2. Nikiforov, M.A., et al. 2002. TRRAP-dependent and TRRAP-independent transcriptional activation by Myc family oncoproteins. Mol. Cell. Biol. 22: 5054-5063.
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4. Liu, X., et al. 2008. STAGA recruits mediator to the Myc oncoprotein to stimulate transcription and cell proliferation. Mol. Cell. Biol. 28: 108-121.
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8. Dai, M.S., et al. 2010. Ribosomal protein L11 associates with c-Myc at 5 S rRNA and tRNA genes and regulates their expression. J. Biol. Chem. 285: 12587-12594.
9. Huang, L., et al. 2011. Prevention of transcriptional silencing by a replicator-binding complex consisting of SWI/SNF, MeCP1, and hnRNP C1/C2. Mol. Cell. Biol. 31: 3472-3484.