

TRRAP (H-300): sc-11411



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 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 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.

APPLICATIONS

TRRAP (H-300) 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 (H-300) is also recommended for detection of TRRAP in additional species, including equine, canine, bovine 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 MOLT-4 nuclear extract: sc-2151.

STORAGE

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

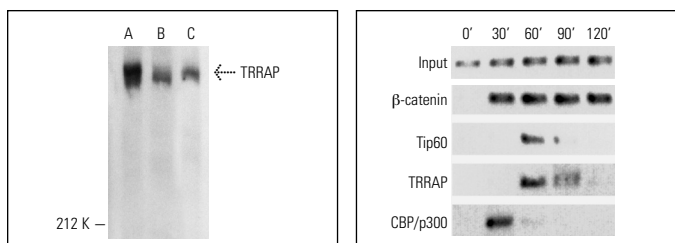
PROTOCOLS

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

RESEARCH USE

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

DATA



TRRAP (H-300): sc-11411. Western blot analysis of TRRAP expression in HeLa (A), K-562 (B) and MOLT-4 (C) nuclear extracts.

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.

SELECT PRODUCT CITATIONS

- Feng, Y., et al. 2003. TIP49 regulates β-catenin-mediated neoplastic transformation and T-cell factor target gene induction via effects on chromatin remodeling. *Cancer Res.* 63: 8726-8734.
- Memedula, S., et al. 2003. Sequential recruitment of HAT and SWI/SNF components to condensed chromatin by VP16. *Curr. Biol.* 13: 241-246.
- Raha, T., et al. 2005. HIV-1 Tat stimulates transcription complex assembly through recruitment of TBP in the absence of TAFs. *PLoS Biol.* 3: e44.
- Oishi, H., et al. 2006. An hGCN5/TRRAP histone acetyltransferase complex co-activates BRCA1 transactivation function through histone modification. *J. Biol. Chem.* 281: 20-26.
- Kenneth, N.S., et al. 2007. TRRAP and GCN5 are used by c-Myc to activate RNA polymerase III transcription. *Proc. Natl. Acad. Sci. USA* 104: 14917-14922.
- Suzuki, C., et al. 2007. Identification of Myc-associated protein with JmjC domain as a novel therapeutic target oncogene for lung cancer. *Mol. Cancer Ther.* 6: 542-551.
- Liu, X., et al. 2008. STAGA recruits Mediator to the MYC oncoprotein to stimulate transcription and cell proliferation. *Mol. Cell. Biol.* 28: 108-121.
- Balzer, R.J. 2008. Snu56p is required for Mer1p-activated meiotic splicing. *Mol. Cell. Biol.* 28: 2497-2508.
- Hernandez, C., et al. 2010. Regulation of hepatic ApoC3 expression by PGC-1β mediates hypolipidemic effect of nicotinic acid. *Cell Metab.* 12: 411-419.
- Zelin, E., et al. 2012. The p23 molecular chaperone and GCN5 acetylase jointly modulate protein-DNA dynamics and open chromatin status. *Mol. Cell* 48: 459-470.