



MIP-T3 (h): 293T Lysate: sc-116118

BACKGROUND

Tumor necrosis factor receptor (TNFR) superfamily members transmit signals regulating proliferation, differentiation and apoptosis in various types of cells. TNFR-associated factors (TRAFs) are a family of proteins that were initially discovered as downstream signal transducers of the TNFR superfamily. TRAF3 contains an N-terminal ring finger/zinc finger region that is thought to be essential for downstream signaling. MIP-T3 is associated with TRAF3. MIP-T3 binds to taxol-stabilized microtubules and to Tubulin *in vitro*, and MIP-T3 recruits TRAF3 to microtubules when both proteins are overexpressed. The MIP-T3/TRAF3 interaction requires the coiled-coil TRAF-N domain of TRAF3. This interaction may provide a novel mechanism in sequestering TRAF3 to the cytoskeletal network.

REFERENCES

1. Ling, L. and Goeddel, D.V. 2000. MIP-T3, a novel protein linking tumor necrosis factor receptor-associated factor 3 to the microtubule network. *J. Biol. Chem.* 275: 23852-23860.
2. Niu, Y., Murata, T., Watanabe, K., Kawakami, K., Yoshimura, A., Inoue, J., Puri, R.K. and Kobayashi, N. 2003. MIP-T3 associates with IL-13R α 1 and suppresses Stat6 activation in response to IL-13 stimulation. *FEBS Lett.* 550: 139-143.
3. Dadgostar, H., Doyle, S.E., Shahangian, A., Garcia, D.E. and Cheng, G. 2003. T3JAM, a novel protein that specifically interacts with TRAF3 and promotes the activation of JNK1. *FEBS Lett.* 553: 403-407.
4. Morris, J.A., Kandpal, G., Ma, L. and Austin, C.P. 2003. DISC1 (Disrupted-In-Schizophrenia 1) is a centrosome-associated protein that interacts with MAP1A, MIP-T3, ATF4/5 and NUDEL: regulation and loss of interaction with mutation. *Hum. Mol. Genet.* 12: 1591-1608.
5. Kakiuchi, C., Ishiwata, M., Nanko, S., Kunugi, H., Minabe, Y., Nakamura, K., Mori, N., Fujii, K., Yamada, K., Yoshikawa, T. and Kato, T. 2007. Association analysis of ATF4 and ATF5, genes for interacting-proteins of DISC1, in bipolar disorder. *Neurosci. Lett.* 417: 316-321.
6. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 607380. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Kunitomo, H. and Iino, Y. 2008. *Caenorhabditis elegans* DYF-11, an orthologue of mammalian TRAF3ip1/MIP-T3, is required for sensory cilia formation. *Genes Cells* 13: 13-25.
8. Li, C., Inglis, P.N., Leitch, C.C., Efimenko, E., Zaghloul, N.A., Mok, C.A., Davis, E.E., Bialas, N.J., Healey, M.P., Héon, E., Zhen, M., Swoboda, P., Katsanis, N. and Leroux, M.R. 2008. An essential role for DYF-11/MIP-T3 in assembling functional intraflagellar transport complexes. *PLoS Genet.* 4: e1000044.

CHROMOSOMAL LOCATION

Genetic locus: TRAF3IP1 (human) mapping to 2q37.3.

RESEARCH USE

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

PRODUCT

MIP-T3 (h): 293T Lysate represents a lysate of human MIP-T3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

MIP-T3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive MIP-T3 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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