

MIP-T3 (C-9): sc-166337

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., et al. 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., et al. 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., et al. 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., et al. 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/>

CHROMOSOMAL LOCATION

Genetic locus: TRAF3IP1 (human) mapping to 2q37.3; Traf3ip1 (mouse) mapping to 1 D.

SOURCE

MIP-T3 (C-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-29 at the N-terminus of MIP-T3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-166337 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

MIP-T3 (C-9) is recommended for detection of MIP-T3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 MIP-T3 siRNA (h): sc-106224, MIP-T3 siRNA (m): sc-149437, MIP-T3 shRNA Plasmid (h): sc-106224-SH, MIP-T3 shRNA Plasmid (m): sc-149437-SH, MIP-T3 shRNA (h) Lentiviral Particles: sc-106224-V and MIP-T3 shRNA (m) Lentiviral Particles: sc-149437-V.

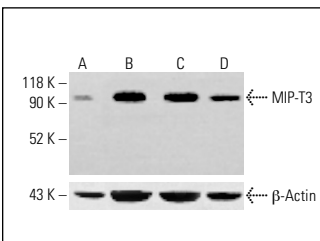
Molecular Weight of MIP-T3: 83 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, MIP-T3 (h): 293T Lysate: sc-116118 or chemically-treated HCT-116 whole cell lysate.

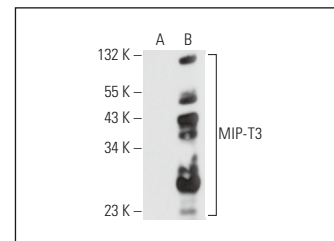
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MIP-T3 (C-9): sc-166337. Western blot analysis of MIP-T3 expression in untreated HCT-116 (A), chemically-treated HCT-116 (B, C) and K-562 (D) whole cell lysates. β -Actin (C4): sc-47778 used as loading control. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.



MIP-T3 (C-9): sc-166337. Western blot analysis of MIP-T3 expression in non-transfected: sc-117752 (A) and human MIP-T3 transfected: sc-116118 (B) 293T whole cell lysates.

STORAGE

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

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.