

T6BP (3098C2a): sc-81390

BACKGROUND

Tumor necrosis factor receptor (TNFR)-associated factors (TRAFs) are a family of proteins that are downstream signal transducers of the TNFR superfamily. The T6BP (also designated T6BP and TXBP151) gene encodes a protein, which functions as a Tax1 (human T cell leukemia virus type I) binding protein 1 and a TRAF6-interacting protein. T6BP interacts with the N-terminal ring finger and zinc finger domains of TRAF6 through its coiled-coil region. IL-1 induces the TRAF6-T6BP complex depending on the presence of the IL-1 receptor-associated kinase (IRAK). Therefore, TRAF6 exists in two different complexes, TRAF6-IRAK or TRAF6-T6BP after IL-1 stimulation. However, T6BP does not play a direct role in the activation of I κ B kinases or Jun N-terminal kinase. T6BP, an 86 kDa protein, also binds to T cell leukemia virus type-I Tax protein. In NIH/3T3 cells, T6BP can inhibit apoptosis induced by TNF, which in turn causes proteolysis of the T6BP protein. In addition, T6BP can interact with A20, which is a Cys2/Cys2 zinc finger protein induced by a variety of inflammatory stimuli, to mediate the anti-apoptotic activity of A20.

REFERENCES

1. Rothe, M., Wong, S.C., Henzel, W.J. and Goeddel, D.V. 1994. A novel family of putative signal transducers associated with the cytoplasmic domain of the 75 kDa tumor necrosis factor receptor. *Cell* 78: 681-692.
2. Hu, H.M., O'Rourke, K., Boguski, M.S. and Dixit, V.M. 1994. A novel RING finger protein interacts with the cytoplasmic domain of CD40. *J. Biol. Chem.* 269: 30069-30072.
3. Cheng, G., Cleary, A.M., Ye, Z.S., Hong, D.I., Lederman, S. and Baltimore, D. 1995. Involvement of CRAF1, a relative of TRAF, in CD40 signaling. *Science* 267: 1494-1498.
4. De Valck D., Jin D.Y., Heynink K., Van de Craen M., Contreras R., Fiers W., Jeang K.T. and Beyaert R. 1999. The zinc finger protein A20 interacts with a novel anti-apoptotic protein which is cleaved by specific caspases. *Oncogene* 18: 4182-4190.
5. Ling L. and Goeddel D.V. 2000. T6BP, a TRAF6-interacting protein involved in IL-1 signaling. *Prot. Nat. Acad. Sci. USA* 97: 9567-9572.

CHROMOSOMAL LOCATION

Genetic locus: TAX1BP1 (human) mapping to 7p15.2.

SOURCE

T6BP (3098C2a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the C-terminus of T6BP of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

PROTOCOLS

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

APPLICATIONS

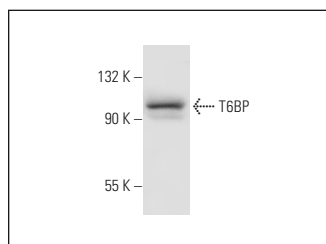
T6BP (3098C2a) is recommended for detection of T6BP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for T6BP siRNA (h): sc-106831, T6BP shRNA Plasmid (h): sc-106831-SH and T6BP shRNA (h) Lentiviral Particles: sc-106831-V.

Molecular Weight of T6BP: 86 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

DATA



T6BP (3098C2a): sc-81390. Western blot analysis of T6BP expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Journo, C., Filipe, J., About, F., Chevalier, S.A., Afonso, P.V., Brady, J.N., Flynn, D., Tangy, F., Israël, A., Vidalain, P.O., Mahieux, R. and Weil, R. 2009. NRP/Optineurin cooperates with TAX1BP1 to potentiate the activation of NF κ B by human T-lymphotropic virus type 1 tax protein. *PLoS Pathog.* 5: e1000521.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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