

NNT-1/BSF-3 (h): 293T Lysate: sc-175983

BACKGROUND

Neurotrophin-1/B cell-stimulating factor-3 (NNT-1/BSF-3, also known as cardiotrophin-like cytokine) is found mainly in lymph nodes and spleen. NNT-1/BSF-3 induces tyrosine phosphorylation of the signal transducing receptor molecule glycoprotein 130 (gp130), leukemia inhibitory factor receptor β , and signal transducer and activator of transcription 3 in the SK-N-MC human neuroblastoma cells. The activation of gp130 distinguishes a group of cytokines referred to as the IL-6 family. They all show the conserved location of one intron in their gene structure and, in common with cytokines of the hematopoietin superfamily, the presence of a four-helix bundle in their protein structure. In addition to features typical of IL-6 family cytokines, including neurotropic effects, NNT-1/BSF-3 shows B cell-stimulating capability.

REFERENCES

1. Yamasaki, K., Taga, T., Hirata, Y., Yawata, H., Kawanishi, Y., Seed, B., Taniguchi, T., Hirano, T. and Kishimoto, T. 1988. Cloning and expression of the human interleukin-6 (BSF-2/IFN- β 2) receptor. *Science* 241: 825-828.
2. Kishimoto, T., Akira, S., Narazaki, M. and Taga, T. 1995. Interleukin-6 family of cytokines and gp130. *Blood* 86: 1243-1254.
3. Taga, T. and Kishimoto, T. 1997. Gp130 and the interleukin-6 family of cytokines. *Annu. Rev. Immunol.* 15: 797-819.
4. Grotzinger, J., Kurupkat, G., Wollmer, A., Kalai, M. and Rose-John, S. 1997. The family of the IL-6-type cytokines: specificity and promiscuity of the receptor complexes. *Proteins* 27: 96-109.
5. Senaldi, G., Varnum, B.C., Sarmiento, U., Starnes, C., Lile, J., Scully, S., Guo, J., Elliott, G., McNinch, J., Shaklee, C.L., Freeman, D., Manu, F., Simonet, W.S., Boone, T. and Chang, M.S. 1999. Novel neurotrophin-1/B cell-stimulating factor-3: a cytokine of the IL-6 family. *Proc. Natl. Acad. Sci. USA* 96: 11458-11463.

CHROMOSOMAL LOCATION

Genetic locus: CLCF1 (human) mapping to 11q13.2.

PRODUCT

NNT-1/BSF-3 (h): 293T Lysate represents a lysate of human NNT-1/BSF-3 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

NNT-1/BSF-3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive NNT-1/BSF-3 antibodies. Recommended use: 10-20 μ l per lane.

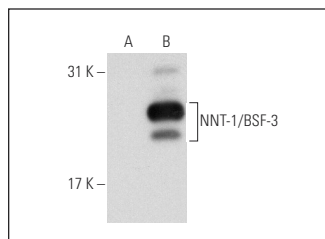
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NNT-1/BSF-3 (985-1): sc-74243 is recommended as a positive control antibody for Western Blot analysis of enhanced human NNT-1/BSF-3 expression in NNT-1/BSF-3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



NNT-1/BSF-3 (985-1): sc-74243. Western blot analysis of NNT-1/BSF-3 expression in non-transfected: sc-117752 (A) and human NNT-1/BSF-3 transfected: sc-175983 (B) 293T whole cell lysates.

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.