

# NNT-1/BSF-3 (985-1): sc-74243

## 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  $\beta$ , 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

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3. Taga, T. and Kishimoto, T. 1997. Gp130 and the interleukin-6 family of cytokines. *Annu. Rev. Immunol.* 15: 797-819.
4. Grotzinger, J., Kurapatk, 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.

## SOURCE

NNT-1/BSF-3 (985-1) is a mouse monoclonal antibody raised against full length recombinant NNT-1/BSF-3 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2b</sub> in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

## 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](http://www.scbt.com) for detailed protocols and support products.

## APPLICATIONS

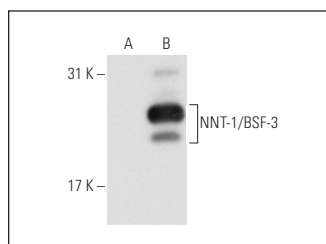
NNT-1/BSF-3 (985-1) is recommended for detection of NNT-1/BSF-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NNT-1/BSF-3 siRNA (h): sc-39685, NNT-1/BSF-3 shRNA Plasmid (h): sc-39685-SH and NNT-1/BSF-3 shRNA (h) Lentiviral Particles: sc-39685-V.

Molecular Weight of NNT-1/BSF-3: 28 kDa.

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

## 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.