

NTAL (m): 293T Lysate: sc-122140

BACKGROUND

Non-T cell activation linker (NTAL), a transmembrane adaptor protein, is also designated membrane-associated adapter molecule, Williams-Beuren syndrome chromosome region 15 protein or LAB (linker of activated B cells). NTAL is present in membrane microdomains (rafts) of B cells, NK cells and myeloid cells, and in monocytes and mast cells, but not in resting T lymphocytes. NTAL becomes rapidly tyrosine-phosphorylated upon cross-linking of the B cell receptor (BCR) or of high-affinity Fc γ and Fc ϵ receptors of myeloid cells and then associates with the cytoplasmic signaling molecules. NTAL is highly expressed in spleen, lymph node germinal centers and peripheral blood lymphocytes. Defects in the gene encoding for NTAL may cause the musculo-skeletal and cardiovascular abnormalities that characterize the rare developmental disorder Williams-Beuren syndrome (WBS).

REFERENCES

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2. Janssen, E., Zhu, M., Zhang, W., Koonpaew, S. and Zhang, W. 2003. LAB: a new membrane-associated adaptor molecule in B cell activation. *Nat. Immunol.* 4: 117-123.
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4. Koonpaew, S., Janssen, E., Zhu, M. and Zhang, W. 2004. The importance of three membrane-distal tyrosines in the adaptor protein NTAL/LAB. *J. Biol. Chem.* 279: 11229-11235.
5. Tedoldi, S., Paterson, J.C., Hansmann, M.L., Natkunam, Y., Rüdiger, T., Angelisova, P., Du, M.Q., Robertson, H., Roncador, G., Sanchez, L., Pozzobon, M., Masir, N., Barry, R., Pileri, S., Mason, D.Y., et al. 2006. Transmembrane adaptor molecules: a new category of lymphoid-cell markers. *Blood* 107: 213-221.

CHROMOSOMAL LOCATION

Genetic locus: Lat2 (mouse) mapping to 5 G2.

PRODUCT

NTAL (m): 293T Lysate represents a lysate of mouse NTAL transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

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.

APPLICATIONS

NTAL (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NTAL antibodies. Recommended use: 10-20 μ l per lane.

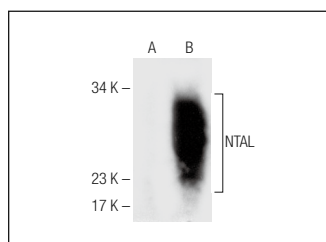
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NTAL (D-10): sc-271000 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse NTAL expression in NTAL transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

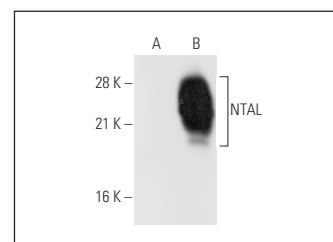
RECOMMENDED SUPPORT REAGENTS

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.

DATA



NTAL (D-10): sc-271000. Western blot analysis of NTAL expression in non-transfected: sc-117752 (A) and mouse NTAL transfected: sc-122140 (B) 293T whole cell lysates.



NTAL (6D620): sc-71729. Western blot analysis of NTAL expression in non-transfected: sc-117752 (A) and mouse NTAL transfected: sc-122140 (B) 293T whole cell lysates.

RESEARCH USE

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