

NTAL (6D620): sc-71729

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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- 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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- 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.
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CHROMOSOMAL LOCATION

Genetic locus: LAT2 (human) mapping to 7q11.23; Lat2 (mouse) mapping to 5 G2.

SOURCE

NTAL (6D620) is a mouse monoclonal antibody raised against amino acids 91-244 of NTAL of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

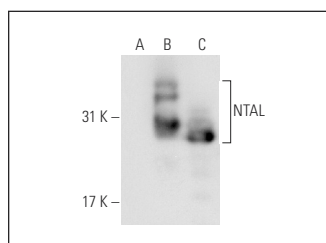
NTAL (6D620) is recommended for detection of NTAL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1×10^6 cells).

Suitable for use as control antibody for NTAL siRNA (h): sc-62703, NTAL siRNA (m): sc-62704, NTAL shRNA Plasmid (h): sc-62703-SH, NTAL shRNA Plasmid (m): sc-62704-SH, NTAL shRNA (h) Lentiviral Particles: sc-62703-V and NTAL shRNA (m) Lentiviral Particles: sc-62704-V.

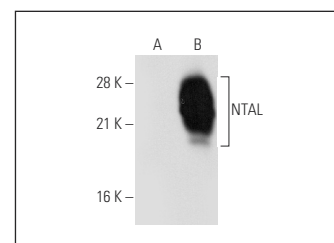
Molecular Weight of NTAL: 30 kDa.

Positive Controls: NTAL (m): 293T Lysate: sc-122140, THP-1 cell lysate: sc-2238 or NTAL (h): 293T Lysate: sc-177644.

DATA



NTAL (6D620): sc-71729. Western blot analysis of NTAL expression in non-transfected 293T: sc-117752 (A), human NTAL transfected 293T: sc-177644 (B) and THP-1 (C) 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.

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 for detailed protocols and support products.