

NTAL (F-20): sc-66793

BACKGROUND

Non-T cell activation linker protein (NTAL), a transmembrane adaptor protein, is also designated non-T cell activation linker, 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 cardio-vascular abnormalities that characterize the rare developmental disorder Williams-Beuren syndrome (WBS).

REFERENCES

- Martindale, D.W., Wilson, M.D., Wang, D., Burke, R.D., Chen, X., Duronio, V. and Koop, B.F. 2000. Comparative genomic sequence analysis of the Williams syndrome region (LIMK1-RFC2) of human chromosome 7q11.23. *Mamm. Genome* 11: 890-898.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

NTAL (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of NTAL of rat origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66793 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NTAL (F-20) is recommended for detection of non-T cell activation linker of mouse and rat 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

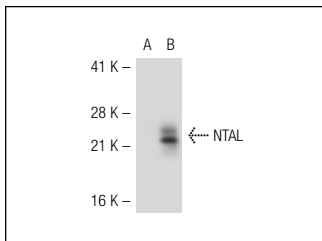
Molecular Weight of NTAL: 30 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NTAL (F-20): sc-66793. 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.

RESEARCH USE

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

PROTOCOLS

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



Try **NTAL (D-10): sc-271000** or **NTAL (NAP-07): sc-51686**, our highly recommended monoclonal alternatives to NTAL (F-20).