

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                               |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human NTAL in Western blots.                                                |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Sheep IgG                                                                |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                           |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human NTAL<br>Met1-Ala243<br>Accession # Q9GZY6 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm     |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                        |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                     |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                                                 |                                                                        |
|-------------------------------------------------|------------------------------------------------------------------------|
| <b>CyTOF-ready</b>                              | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>                             | Optimal dilution of this antibody should be experimentally determined. |
| <b>Intracellular Staining by Flow Cytometry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Non-T cell activation linker (NTAL), also known as linker for activation of B cells (LAB), is a transmembrane adaptor protein involved in immunoreceptor signaling. NTAL is expressed in lipid raft microdomains of B cells, mast cells, monocytes and NK cells. Rapid tyrosine phosphorylation of NTAL occurs upon BCR aggregation in B cells, FcεRI aggregation and Kit activation in mast cells, and FcγRI aggregation in monocytes. Phosphorylated NTAL recruits signaling molecules such as Grb2, Gab1, and c-Cbl into receptor-signaling complexes. Defects in the NTAL gene may cause Williams-Beuren syndrome, a rare genetic disorder characterized by mild mental retardation, and abnormalities in the cardiovascular and musculo-skeletal systems.

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