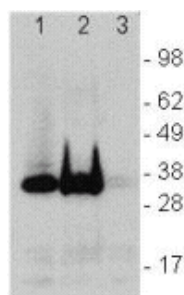


Anti-Human LAT Purified

Catalog Number: 14-9967

Also Known As: Linker for activation of T-cells

RUO: For Research Use Only



Immunoblotting of 10^6 normal peripheral human blood cells (lane 1), Jurkat (lane 2), and C57BL/6 splenocytes (lane 3) with $5 \mu\text{g/mL}$ Anti-Human LAT Purified. Bands were visualized using Anti-Mouse IgG HRP.

Product Information

Contents: Anti-Human LAT Purified


REF Catalog Number: 14-9967

Clone: LAT.10-17 (10-17)

Concentration: 0.5 mg/ml


Host/Isotype: Mouse IgG1, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 Temperature Limitation: Store at 2-8°C.

LOT Batch Code: Refer to Vial

 Use By: Refer to Vial

 Caution, contains Azide

Description

This LAT.10-17 (10-17) monoclonal antibody reacts with human Linker for Activation of T cells (LAT), which is essential for T cell receptor (TCR)-mediated signal transduction. Characterized as an integral transmembrane protein, this ~37-kDa molecule does not possess a true extracellular domain. Upon TCR/CD3 engagement, LAT localizes to lipid rafts and is tyrosine phosphorylated by ZAP-70, leading to the recruitment and activation of other downstream signaling molecules such as Grb-2, PLC γ , and PI3K. This adapter molecule has been shown to be required for T cell activation, as well as thymocyte and T regulatory cell development. In humans, LAT is expressed on peripheral blood lymphocytes, lymph nodes, and tonsil. Studies in mice have shown that LAT is expressed in thymocytes, T cells, mast cells, natural killer cells, megakaryocytes, platelets, and early B cells. This antibody does not crossreact with the mouse antigen.

Applications Reported

This LAT.10-17 (10-17) antibody has been reported for use in immunoblotting (WB) and immunoprecipitation (IP).

Applications Tested

LAT.10-17 (10-17) was tested by western blot and immunoprecipitation on lysates prepared from human peripheral blood cells, Jurkat cells, and C57BL/6 splenocytes. This antibody can be used at $5 \mu\text{g/mL}$. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Burbach BJ, Medeiros RB, Mueller KL, Shimizu Y. T-cell receptor signaling to integrins. *Immunol Rev.* 2007 Aug;218:65-81.

Koonpaew S, Shen S, Flowers L, Zhang W. LAT-mediated signaling in CD4+CD25+ regulatory T cell development. *J Exp Med.* 2006 Jan 23;203(1):119-29.

Malissen B, Aguado E, Malissen M. Role of the LAT adaptor in T-cell development and Th2 differentiation. *Adv Immunol.* 2005;87:1-25.

Related Products

14-4714 Mouse IgG1 K Isotype Control Purified

