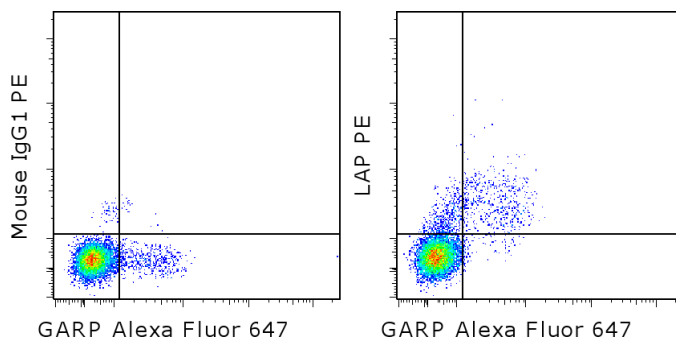


Anti-Human LAP (Latency Associated Peptide) PE

Catalog Number: 12-9829

Also known as: Pro-TGF beta 1, LAP/TGF beta 1

RUO: For Research Use Only. Not for use in diagnostic procedures.



Normal human peripheral blood cells were stimulated with anti-CD3, anti-CD28 and recombinant human IL-2 for 1 day, and then stained with Anti-Human CD4 FITC (cat. 11-0048), Anti-Human GARP Alexa Fluor® 647 (cat. 51-9882) and Mouse IgG1 K Isotype Control PE (cat. 12-4714) (left) or Anti-Human LAP (Latency Associated Peptide) PE (right). CD4⁺ cells in the lymphocyte gate were used for analysis

Product Information

Contents: Anti-Human LAP (Latency Associated Peptide) PE

Catalog Number: 12-9829

Clone: FNLAP

Concentration: 5 µL (0.5 µg)/test

Host/Isotype: Mouse IgG1, kappa

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

Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.

Batch Code: Refer to vial

Use By: Refer to vial

Description

The FNLAP monoclonal antibody reacts with human latency associated peptide (LAP, pro-TGF beta 1, LAP/TGF beta 1). Many different cells produce TGF beta and it mediates effects on the proliferation, differentiation and function of many cell types. TGF beta is synthesized as a precursor that contains LAP at the N-terminus and mature TGF beta at the C-terminus. Processing and cleavage of the precursor protein between amino acids 278 and 279 results in the formation of LAP dimers and TGF beta dimers that then non-covalently associate with each other to form the small latent TGF beta complex. LAP is secreted and can be found in the extracellular matrix. In addition, LAP can also be expressed on platelets and activated regulatory T cells. It is believed that this surface-expressed LAP is due to the binding of LAP to GARP (LRRC32), which is a transmembrane protein that is also found at high levels on platelets and activated regulatory T cells.

Applications Reported

This FNLAP antibody has been reported for use in flow cytometric analysis.

Applications Tested

This FNLAP antibody has been pre-titrated and tested by flow cytometric analysis of stimulated normal human peripheral blood cells. This can be used at 5 µL (0.5 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

References

Schuler PJ, Schilling B, Harasymczuk M, Hoffmann TK, Johnson J, Lang S, Whiteside TL. Phenotypic and functional characteristics of CD4⁺ CD39⁺ FOXP3⁺ and CD4⁺ CD39⁺ FOXP3^{neg} T-cell subsets in cancer patients. *Eur J Immunol.* 2012 Jul;42(7):1876-85. (FNLAP, FC, PubMed)

Mantel PY, Schmidt-Weber CB. Transforming growth factor-beta: recent advances on its role in immune tolerance. *Methods Mol Biol.* 2011;677:303-38.

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Tran DQ, Andersson J, Wang R, Ramsey H, Unutmaz D, Shevach EM. GARP (LRRC32) is essential for the surface expression of latent TGF-beta on platelets and activated FOXP3+ regulatory T cells. Proc Natl Acad Sci U S A. 2009 Aug 11;106(32):13445-50.

Chen Y, Ali T, Todorovic V, O'leary JM, Kristina Downing A, Rifkin DB. Amino acid requirements for formation of the TGF-beta-latent TGF-beta binding protein complexes. J Mol Biol. 2005 Jan 7;345(1):175-86.

Khalil N. TGF-beta: from latent to active. Microbes Infect. 1999 Dec;1(15):1255-63

Related Products

11-0048 Anti-Human CD4 FITC (OKT4 (OKT-4))

12-4714 Mouse IgG1 K Isotype Control PE (P3.6.2.8.1)

48-4776 Anti-Human Foxp3 eFluor® 450 (PCH101)

51-9882 Anti-Human GARP Alexa Fluor® 647 (To Be Discontinued. Refer to Cat. No. 50-9882) (G14D9)