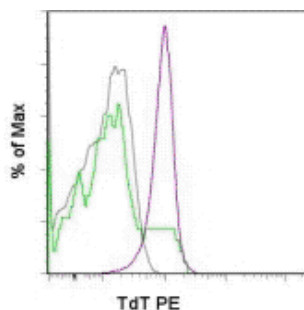


Anti-Human/Mouse TdT PE

Catalog Number: 12-5846

Also Known As: terminal deoxynucleotidyl transferase

RUO: For Research Use Only



Staining of C57BL/6 thymocytes with Anti-Mouse CD4 FITC (cat. 11-0041) and Anti-Mouse CD8a PerCP-Cy5.5 (cat. 45-0081) followed by fixation and permeabilization with the Foxp3 Staining Buffers (cat. 00-5523) and subsequent staining with 0.25 µg of Anti-Mouse TdT PE. CD4 single positives are shown in gray, CD8 single positives in green and double positives in purple.

Product Information

Contents: Anti-Human/Mouse TdT PE


REF **Catalog Number:** 12-5846

Clone: 19-3


Concentration: 0.2 mg/mL

Host/Isotype: Mouse IgG2b, 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.

LOT **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

Description

This 19-3 monoclonal antibody recognizes human and mouse terminal-deoxynucleotidyl transferase (TdT), a 60 kDa polymerase responsible for the template-independent addition of N-nucleotides at gene segment junctions of developing lymphocytes. Expression is found in the nucleus of immature lymphocytes but not in mature lymphocytes or non-lymphoid cells. Tdt plays a critical role during TCR and Ig gene rearrangement. Regulation of expression in the mouse thymus correlates with T cell selection; decreased or absent after positive selection. Additionally Tdt has been shown to be present in lymphoma or lymphoblastic leukemia cells.

Applications Reported

This 19-3 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This 19-3 antibody has been tested by intracellular staining using the Foxp3 Buffer Set (cat. 00-5521) followed by flow cytometric analysis of mouse thymocytes. This can be used at less than or equal to 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Komori T, Okada A, Stewart V, Alt FW. Lack of N Regions in Antigen Receptor Variable Region Genes of TdT-Deficient Lymphocytes. *Science* 261.5125 (1993): 1171-1175.

Bogue M, Gilfillan S, Benoist C, Mathis D. Regulation of N-region diversity in antigen receptors through thymocyte differentiation and thymus ontogeny. *Proc Natl Acad Sci U S A*. 1992 Nov 15;89(22):11011-5.

Bardales RH, Carrato A, Fleischer M, Schwartz MK, Koziner B. Detection of terminal deoxynucleotidyl transferase (TdT) by flow cytometry in leukemic disorders. *J Histochem Cytochem*. 1989 Apr;37(4):509-13.

Bollum FJ, Chang LM. Immunological detection of a conserved structure for terminal deoxynucleotidyltransferase. *J Biol Chem*. 1981 Aug 25;256(16):8767-70.

Related Products

00-5521 Foxp3 Fixation/Permeabilization Concentrate and Diluent

00-5523 Foxp3 Staining Buffer Set

11-0041 Anti-Mouse CD4 FITC (GK1.5)

14-4031 Rat IgG2b K Isotype Control Purified

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Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com