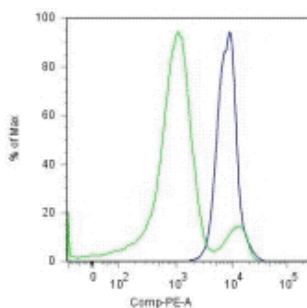


Anti-Human/Mouse Pax5 PE

Catalog Number: 12-9918

Also Known As: Pax-5

RUO: For Research Use Only



Surface staining of C57BL/6 splenocytes with Anti-Mouse CD23 PE-Cy7 (cat. 25-0232) and Anti-Mouse CD21/CD35 FITC (cat. 11-0211) followed by intracellular staining using the Foxp3 Staining Buffer Set (cat. 00-5523) and 0.125 μ g of Anti-Human/Mouse Pax5 PE. Histogram depicts cell populations based on surface stains comprising the marginal zone cells (CD21(high)CD23-) (blue histogram) or T1 cells (CD21-CD23-) (green histogram).

Product Information

Contents: Anti-Human/Mouse Pax5 PE


REF **Catalog Number:** 12-9918

Clone: 1H9

Concentration: 0.2 mg/ml

Host/Isotype: Rat IgG2a, 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

The monoclonal antibody 1H9 recognizes both mouse and human Pax5. Pax5, also known as BSAP (B cell specific activator protein), is a member of the paired box (pax) family of transcription factors. Pax5 is the only member of the pax family of transcription factors that is expressed in hematopoietic cells. During embryogenesis, Pax5 is transiently expressed in the brain of mice and in the mesencephalon and spinal cord of humans. Its expression is upregulated early in B cell development at the time of B cell commitment and is maintained throughout most subsequent stages. Suppression of Pax5 is essential for expression of Blimp-1 and the terminal differentiation of plasma cells. In the spleen, expression of Pax5 is higher in marginal zone B cells (B220+ CD21^{high} CD23^{low}) than in other B cells, especially the transition 1 stage (B220+ CD21- CD23-). In addition to its role in B cell development, Pax5 also affects VH-DJH heavy chain recombination as well as influencing the expression of many other B and non-B cell related proteins. Pax5 expression is correlated with many neoplasms. In diffuse large B cell lymphomas (DLBCL) and non-Hodgkin lymphomas Pax5 is often mutated while in B-cell ALL, expression levels are high. Additionally, translocation with elastin, IGH, ETV6, FOXP1, and EVI3 have been identified.

eBioscience recommends that the Foxp3 Buffers (cat. 00-5521) be used for optimal results when using this antibody for intracellular staining and flow cytometric analysis.

Applications Reported

This 1H9 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This 1H9 antibody has been tested by intracellular staining and flow cytometric analysis using the Foxp3 Buffer Set (cat. 00-5523) and protocol. Please click here for Staining Protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This antibody can be used at less than or equal to 0.25 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. 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

Kallies A, Hasbold J, Fairfax K, Pridans C, Emslie D, McKenzie BS, Lew AM, Corcoran LM, Hodgkin PD, Tarlinton DM, Nutt SL. Initiation of plasma-cell differentiation is independent of the transcription factor Blimp-1. *Immunity*. 2007 May;26(5):555-66. (1H9, WB, PubMed)

Cobaleda C, Schebesta A, Delogu A, Busslinger M. Pax5: the guardian of B cell identity and function. *Nat Immunol*. 2007 May;8(5):463-70.

Fuxa M, Busslinger M. Reporter gene insertions reveal a strictly B lymphoid-specific expression pattern of Pax5 in support of its B cell identity function. J Immunol. 2007 Mar 1;178(5):3031-7.

Related Products

00-5523 Foxp3 Staining Buffer Set

11-0211 Anti-Mouse CD21/CD35 FITC (eBio8D9 (8D9))

12-4321 Rat IgG2a K Isotype Control PE

25-0232 Anti-Mouse CD23 PE-Cy7 (B3B4)

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