TECHNICAL DATA SHEET

PE-Cy7 Anti-Mouse CD127 (IL-7Ra) (A7R34)

Catalog Number: 60-1271

PRODUCT INFORMATION

Contents: PE-Cy7 Anti-Mouse CD127 (IL-7Ra) (A7R34)

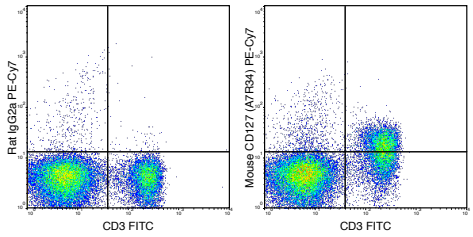
Isotype: Rat IgG2a, kappa

Concentration: 0.2 mg/mL

Clone: A7R34

Reactivity: Mouse

Formulation: 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with FITC Anti-Mouse CD3 (35-0031) and 0.5 ug PE-Cy7 Anti-Mouse CD127 (60-1271) (right panel) or 0.5 ug PE-Cy7 Rat IgG2a isotype control (left panel).

DESCRIPTION

The A7R34 antibody is specific for mouse CD127, a 60-90 kDa cell surface protein also known as the Interleukin-7 Receptor alpha chain, or IL-7R alpha. CD127 is typically expressed at the cell surface as a heterodimer with the common gamma chain (CD132). This complex acts as the functional receptor for IL-7, a cytokine important in T and B cell development, and in mature T cell homeostasis. A second cytokine known as Thymic Stromal Lymphopoietin (TSLP) also binds to a receptor complex of CD127 and the TSLPR chain to trigger activation of dendritic cells, and is involved in B cell development, allergy and autoimmunity.The A7R34 antibody may be used as a phenotypic marker for CD127 on immature B cells, on subsets of thymocytes which are double negative (CD4-CD8-) or single positive (CD4+ or CD8+), and at low levels on mature, peripheral T cells. CD127 is a key marker, when used in combination with CD4 and CD25, to distinguish Treg and effector/memory Treg populations known as T(REM).

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

REFERENCES

Thaventhiran JED, Hoffmann A, Magiera L, de la Roche M, Lingel H, Brunner-Weinzierl M, and Fearon DT. 2012. Proc. Natl. Acad. Sci. 10.1073. (flow cytometry).Jin J, Goldschneider I, and Lai L. 2011. J. Immunol. 186: 1915-1922. (in vivo activation)Vondenhoff MF, Greuter M, Goverse G, Elewaut D, Dewint P, Ware CF, Hoorweg K, Kraal G, and Mebius RE. 2009. J. Immunol. 182(9): 5439-5445. (immunofluorescence microscopy – frozen tissue)Leithauser F, Meinhardt-Krajina T, Fink K, Wotschke B, Moller P and Reimann J. 2006. Am. J. Pathol. 168(6): 1898-1909. (immunohistochemistry – frozen tissue) Seddon B and Zamoyska R. 2002. J. Immunol. 169: 2997-3005. (in vivo activation)Sudo T, Nishikawa S, Ohno N, Akiyama N, Tamakoshi M, Yoshida H and Nishikawa S-I. 1993. Proc. Natl. Acad. Sci. 90: 9125-9129. (in vitro and in vivo blocking - immunoprecipitation)