

**Biotin anti-mouse CD127 (IL-7R $\alpha$ )**

**Catalog # / Size:** 1205515 / 50  $\mu$ g  
1205520 / 500  $\mu$ g

**Clone:** SB/199

**Isotype:** Rat IgG2b,  $\kappa$

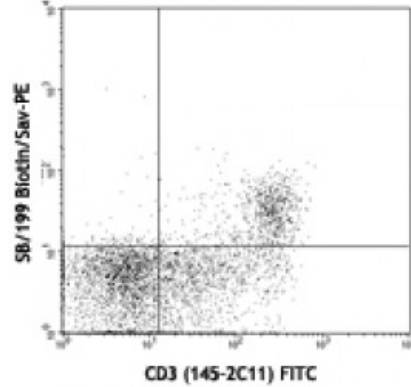
**Immunogen:** mouse pre-B cell line 1A9

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5



C57BL/6 splenocytes stained with SB/199 biotin followed by Sav-PE and CD3 (145-C11) FITC

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is  $\leq 0.25$  microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: To reduce non-specific binding to cells bearing Fc-receptors, pre-incubation of cells with anti-mouse CD16/CD32, clone 93 (Cat. No. 101301/101302), is recommended prior to immunofluorescent staining.

**Application References:**

1. Yamashita Y, *et al.* 1999. *J. Immunol.* 162:5940.
2. Kouro T, *et al.* 2002. *Blood* 100:3672.
3. Maeda K, *et al.* 2005. *Blood* 106:879.
4. Diao J, *et al.* 2004. *J. Immunol.* 173:1826.

**Description:** CD127 is a 60-90 kD type I transmembrane glycoprotein, also known as IL-7 receptor  $\alpha$  chain or IL-7R $\alpha$ . It forms heterodimer with the common  $\gamma$  chain ( $\gamma$ c or CD132) which is shared with the receptors for IL-2, IL-4, IL-9, IL-13, IL-15, and IL-21. CD127 is expressed on immature B cells through early pre-B stage, thymocytes (except CD4/CD8 double positive thymocytes), peripheral T cells, and bone marrow stromal cells. CD127 has been reported to be an useful marker for identifying memory and effector T cells. The ligation of IL-7 with its receptor is important for stimulation of mature and immature T cells as well as immature B cells proliferation and development.

**Antigen References:**

1. Sudo T, *et al.* 1993. *Proc. Natl. Acad. Sci. USA.* 90:9125.
2. He YW and Malek TR. 1998. *Crit Rev. Immunol.* 18:503.
3. Huster K M, *et al.* 2004. *Proc. Natl. Acad. Sci. USA.* 101:5610.
4. Pillai M, *et al.*