## **Product Data Sheet**

## Alexa Fluor® 488 anti-mouse CD127 (IL-7Rα)

Catalog # / 1205535 / 25 µg

Size:

Clone: SB/199

Isotype: Rat IgG2b, ĸ

Immunogen: mouse pre-B cell line 1A9

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

chromatography, and conjugated with

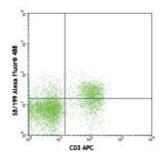
Alexa Fluor® 488 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

0.5 **Concentration:** 



C57BL/6 mouse splenocytes stained with CD3 APC and SB/199

Alexa Fluor® 488

## **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 ≤2.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal

performance for each application.

\* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at

488 nm.

**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 v chain (vc. 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.