## **Product Data Sheet**

## APC/Cy7 anti-mouse CD122 (IL-2Rβ)

**Catalog** # / 1216110 / 100 μg

**Size:** 1216105 / 25 μg

Clone: TM-β1

**Isotype:** Rat IgG2b, κ

Immunogen: Rat T cell line expressing mouse

CD122 (IL-2RB)

Reactivity: Mouse

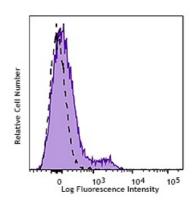
**Preparation:** The antibody was purified by affinity

chromatography and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2 mg/ml



C57BL/6 mouse splenocytes were stained with CD122 (IL-2Rβ, clone TM-β1) APC/Cy7 (filled histogram) or Rat IgG2b, κ APC/Cy7 isotype control (open histogram).

## **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  $\leq 1.0~\mu g$  per million cells in  $100~\mu l$  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: immunoprecipitation<sup>1</sup>, blocking of IL-2 binding<sup>1</sup>, and NK cell depletion<sup>2</sup> in

vivo.

Application References:

1. Barclay A, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.

2. Minami Y, et al. 1993. Annu. Rev. Immunol. 11:245.

3. Suzuki H, et al. 1995. Science 268:1472.

4. Shi Z, et al. 2009. Eur. J. Immunol. 39:2109.

**Description:** 

CD122 is a 70-75 kD IL-2 receptor  $\beta$  chain also known as IL-2R $\beta$ , which is also shared by the IL-15 receptor. It is constitutively expressed by NK cells and at lower levels by T cells, B cells, monocytes, and macrophages. The IL-2R $\beta$  chain can combine with either the common  $\gamma$  subunit ( $\gamma_c$ , CD132) alone

or with the  $\gamma_c$  subunit and the IL-2R $\alpha$  subunit (CD25) to generate intermediate or high affinity IL-2 receptor complexes, respectively. CD122

expression levels can be upregulated by activation. The TM-β1 antibody does inhibit IL-2 binding to the IL-2 receptor. CD122 is expressed on murine, but not human, CD8+ Tregs involved in the maintenance of T cell

homeostasis.

Antigen References:

1. Barclay A, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.

2. Minami Y, et al. 1993. Annu. Rev. Immunol. 11:245.

3. Suzuki H, et al. 1995. Science 268:1472.

4. Shi Z, et al. 2009. Eur. J. Immunol. 39:2109.