SONY

Product Data Sheet

PE/Cy7 anti-mouse CD122 (IL-2Rβ)

Catalog # / Size: 1216075 / 25 µg
1216080 / 100 µg

Clone: TM-β1

Isotype: Rat IgG2b, κ

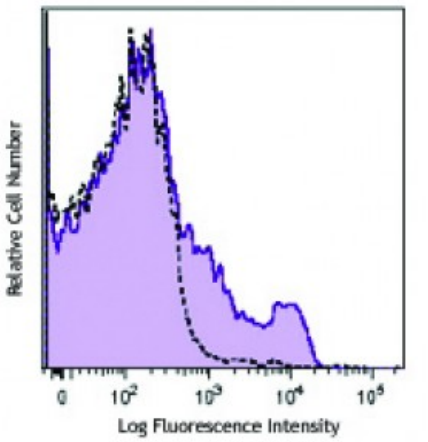
Immunogen: Rat T cell line expressing mouse CD122 (IL-2Rβ)

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

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

Concentration: 0.2



C57BL/6 mouse splenocytes were stained with CD122 (clone TM-β1) PE/Cy7 (filled histogram) or rat IgG2b, κ PE/Cy7 isotype control (dashed 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 ≤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: immunoprecipitation1, blocking of IL-2 binding1, and NK cell depletion *in vivo*2. The LEAF™ purified antibody (Endotoxin <0.1 EU/microg, Azide-Free, 0.2 µm filtered) is recommended for blocking of IL-2 binding *in vivo* and *in vitro* (Cat. No. 123204).

Application References:

1. Tanaka T, *et al.* 1991. *J. Immunol.* 147:2222.
2. Tanaka T, *et al.* 1993. *J. Exp. Med.* 178:1103.
3. Tanaka T, *et al.* 1992. *Int. Immunol.* 4:487.

Description: CD122 is a 70-75 kD IL-2 receptor β chain also known as IL-2Rβ, 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-2Rβ chain can combine with either the common γ subunit (γ_C, CD132) alone or with the γ_C subunit and the IL-2Rα 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*