

APC/Cyanine7 anti-mouse CD122 (IL-2R β) Antibody

Catalog# / Size	123221 / 25 μ g 123222 / 100 μ g
Clone	TM- β 1
Regulatory Status	RUO
Other Names	IL-2 Receptor β chain, IL-2R β
Isotype	Rat IgG2b, κ
Description	CD122 is a 70-75 kD IL-2 receptor β chain also known as IL-2R β , 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 β chain can combine with either the common γ subunit (γ _C , CD132) alone or with the γ _C subunit and the IL-2R α subunit (CD25) to generate intermediate or high affinity IL-2 receptor complexes, respectively. CD122 expression levels can be upregulated by activation. The TM- β 1 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.

Product Details

Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Rat T cell line expressing mouse CD122 (IL-2R β)
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with APC/Cyanine7 under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 =1.0 μ g per million cells in 100 μ l volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ¹ , blocking of IL-2 binding ¹ , and NK cell depletion ² <i>in vivo</i> . The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for blocking of IL-2 binding <i>in vivo</i> and <i>in vitro</i> (Cat. No. 123204).
Additional Product Notes	BioLegend is in the process of converting the name APC/Cy7 to APC/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our APC/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References	1. Tanaka T, <i>et al.</i> 1991. <i>J. Immunol.</i> 147:2222. 2. Tanaka T, <i>et al.</i> 1993. <i>J. Exp. Med.</i> 178:1103. 3. Tanaka T, <i>et al.</i> 1992. <i>Int. Immunol.</i> 4:487.
(PubMed link indicates BioLegend citation)	
RRID	AB_2750454 (BioLegend Cat. No. 123221) AB_2750455 (BioLegend Cat. No. 123222)

Antigen Details

Structure	Ig superfamily, forms high affinity IL-2 receptor with CD25 and CD132 chains or intermediate affinity receptor with CD132 alone, 70-75 kD
Distribution	T and B cells, NK cells, monocytes, macrophages
Function	Critical component of IL-2 and IL-15 signaling
Ligand/Receptor	IL-2, IL-15
Cell Type	B cells, Macrophages, Monocytes, NK cells, T cells, Tregs
Biology Area	Immunology
Molecular Family	CD Molecules, Cytokine/Chemokine Receptors
Antigen References	1. Barclay A, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook Academic Press. 2. Minami Y, <i>et al.</i> 1993. <i>Annu. Rev. Immunol.</i> 11:245. 3. Suzuki H, <i>et al.</i> 1995. <i>Science</i> 268:1472. 4. Shi Z, <i>et al.</i> 2009. <i>Eur. J. Immunol.</i> 39:2109.
Gene ID	16185

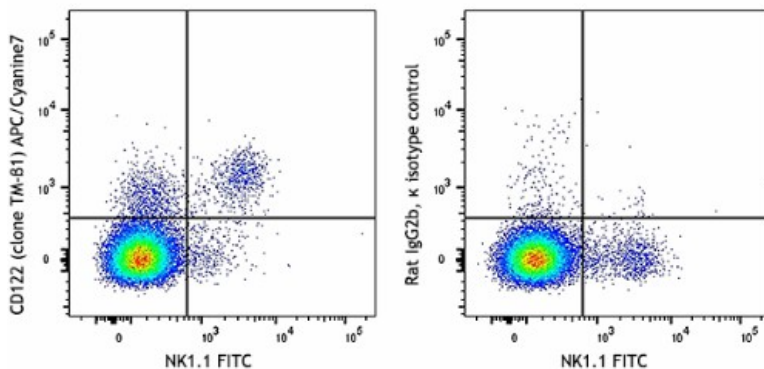
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-mouse CD122 (IL-2R β), FITC anti-mouse CD122 (IL-2R β), PE anti-mouse CD122 (IL-2R β), PerCP/Cyanine5.5 anti-mouse CD122 (IL-2R β), APC anti-mouse CD122 (IL-2R β), PE/Cyanine7 anti-mouse CD122 (IL-2R β), PE/Dazzle™ 594 anti-mouse CD122 (IL-2R β), PE/Cyanine5 anti-mouse CD122 (IL-2R β), APC/Cyanine7 anti-mouse CD122 (IL-2R β), Ultra-LEAF™ Purified anti-mouse CD122 (IL-2R β)

Product Data



C57BL/6 mouse splenocytes were stained with NK-1.1 FITC and CD122 (IL-2R β) (clone TM- β 1) APC/Cyanine7 (left) or Rat IgG2b, κ APC/Cyanine7 isotype control (right).

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