

Monoclonal Antibody to CD122 / IL2RB - PE

Alternate names:	IL-2 receptor subunit beta, IL2 Receptor beta, Interleukin-2 receptor subunit beta, P70-75
Catalog No.:	AM08078RP-N
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	The IL-2 receptor is a complex of three distinct polypeptide chains: (i) the alpha chain which binds IL-2 with low affinity; (ii) the beta chain that binds IL-2 with high affinity; and (iii) the common gamma chain (gc) that does not bind IL-2. (Ref.2) The high affinity receptor complex is an alpha/beta/gamma heterotrimer with a Kd of 1.3×10^{-11} M. (Ref.2) In mouse spleen, CD122 is expressed on ~30% of CD8+ cells and all NK cells, but < 1% of B cells and CD4+ T lymphocytes. In the thymus, its expression is confined to CD4-CD8+ single positive and CD4-CD8- double negative cells. (Ref.4) Cytoplasmic regions of the IL-2R beta chain are involved in IL-2-mediated cellular signaling and, via the interaction of IL-2 and its receptor complex, may be involved in the generation and differentiation of T lymphocytes. (Ref.1,4)
Uniprot ID:	P16297
NCBI:	NP_032394.1
GeneID:	16185
Host / Isotype:	Rat / IgG2a
Clone:	5H4
Immunogen:	Rat myeloma YB2/0 transfected with truncated mouse IL-2RB cDNA. (Ref.1)
Format:	State: Liquid purified Ig fraction. Buffer System: PBS containing 0.09% Sodium Azide as preservative and a stabilizing agent. Label: PE – R-Phycoerythrin
Applications:	Flow Cytometry: $< / = 0.2 \mu\text{g}/10^6$ cells. (Ref.1) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognises beta chain (Mr. 90-100 kDa) of the IL-2 Receptor. It does not block IL-2 binding. (Ref.1) Species: Mouse. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

- General Readings:**
1. Malek, T.R., et al. 1995. J. Interferon Cytokine Res. 15:447.
 2. Minami, Y., et al. 1993. Annu. Rev. Immunol. 11:245.
 3. Taniguchi, T., and Y. Minami. 1993. Cell 73:5.
 4. Tanaka, T., et al. 1991. J. Immunol. 147:2222.