

## Product datasheet for **AM08078FC-N**

### **IL2rb Rat Monoclonal Antibody [Clone ID: 5H4]**

#### **Product data:**

|                       |   |
|-----------------------|---|
| Product Type:         | Primary Antibodies  |
| Clone Name:           | 5H4   |
| Applications:         | FC  |
| Recommended Dilution: | <b>Flow Cytometry:</b> < / = 1 µg/10e6 cells. (Ref.1)   |
| Reactivity:           | Mouse   |
| Host:                 | Rat   |
| Isotype:              | IgG2a   |
| Clonality:            | Monoclonal  |
| Immunogen:            | Rat myeloma YB2/0 transfected with truncated mouse IL-2RB cDNA. (Ref.1)   |
| Specificity:          | This antibody recognises beta chain (Mr. 90-100 kDa) of the IL-2 Receptor. It does not block IL-2 binding. (Ref.1)  |
| Formulation:          | PBS containing 0.09% Sodium Azide as preservative.<br>Label: FITC<br>State: Liquid purified Ig fraction.<br>Label: Fluorescein Isothiocyanate Isomer 1  |
| Concentration:        | lot specific  |
| Conjugation:          | FITC  |
| Storage:              | Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. |
| Stability:            | Shelf life: one year from despatch.   |
| Gene Name:            | interleukin 2 receptor, beta chain  |
| Database Link:        | <a href="#">Entrez Gene 16185 Mouse P16297</a>  |



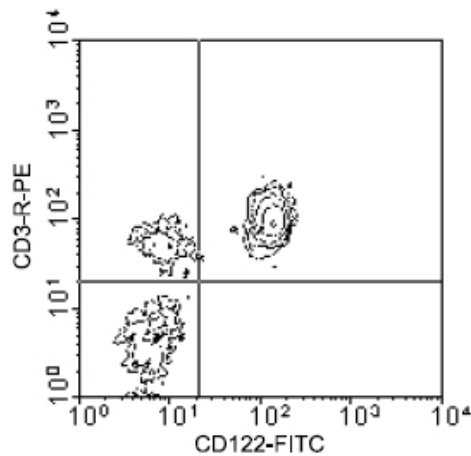
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**Background:**

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  $1.3 \times 10^{-11}$  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)

**Synonyms:**

Interleukin-2 receptor subunit beta, IL-2 receptor subunit beta, IL2 Receptor beta, P70-75

**Product images:**

Immunofluorescent Staining: BALB/c lymph node cells were double stained with Rat anti-Mouse CD3e-PE and Rat anti-Mouse CD122-FITC. Small lymphocytes were gated and analyzed on a FACScan (TM) flow cytometer (BDIS, San Jose, CA). Amount Used: 1 ug/10e6 cells.