

## DESCRIPTION

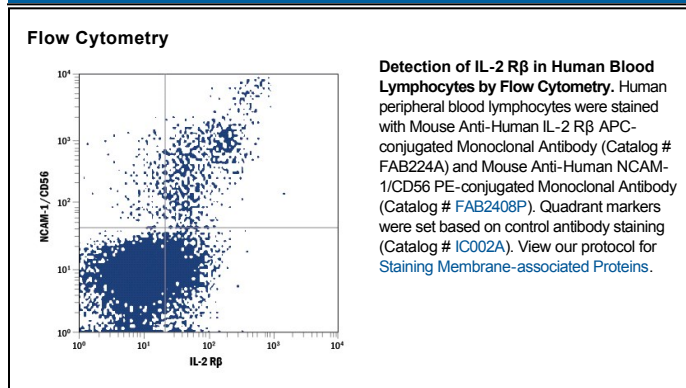
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-2 R $\beta$ in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-2 R $\alpha$ , rh $\gamma_c$ , rhIL-4 R, or rhIL-6 R is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 27302
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-2 R $\beta$ Ala27-Asp239 Accession # NP_000869
<b>Conjugate</b>	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
<b>Formulation</b>	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA



## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> ● 12 months from date of receipt, 2 to 8 °C as supplied.

## BACKGROUND

Functional IL-2 receptors can exist in two affinity states on cell surfaces, the high affinity complex consisting of heterotrimers of the  $\alpha$ ,  $\beta$ , and  $\gamma$  chains and the intermediate affinity complex comprising heterodimers of the  $\beta$  and  $\gamma$  chains. Individual  $\beta$  chains and  $\alpha$  chains exhibit low affinity IL-2 binding, and the  $\gamma$  chain alone does not bind IL-2. In addition to their involvement in IL-2 mediated signal transduction, both the  $\beta$  chain and  $\gamma$  chain have been shown to be required for IL-15 mediated signaling. IL-2 R $\beta$  is a member of the cytokine receptor superfamily. Human IL-2 R $\beta$  cDNA encodes a 551 amino acid (aa) precursor Type I membrane protein with a 26 aa signal peptide, a 214 aa extracellular region, a 25 aa transmembrane region and a 286 aa cytoplasmic domain. A soluble IL-2 R $\beta$  has been identified in the culture supernatants of a human lymphoid cell line, YT, that displays IL-2 R $\beta$ . Soluble IL-2 R $\beta$  binds IL-2 with low affinity and is not an effective IL-2 antagonist on cells displaying the high or intermediate affinity IL-2 signaling receptors. Nevertheless, soluble IL-2 R $\beta$  binds IL-15 with sufficient affinity to neutralize IL-15 biological activities.