

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-2 R β in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) IL-2 R α , recombinant mouse (rm) IL-2 R β , rhIL-2 R γ , and rhIL-15 R is observed. Is also able to
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-2 R β Ala27-Asp239 Accession # NP_000869
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 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 α , β , and γ chains, and the intermediate affinity complex comprising heterodimers of the β and γ chains. Individual β chains and α chains exhibit low affinity IL-2 binding and the γ chain alone does not bind IL-2. In addition to their involvement in IL-2 mediated signal transduction, both the β chain and γ chain have been shown to be required for IL-15 mediated signaling.

IL-2 R β is a member of the cytokine receptor superfamily. Human IL-2 R β cDNA encodes a 551 amino acid residue precursor Type I membrane protein with a 26 residue signal peptide, a 214 residue extracellular region, a 25 residue transmembrane region and a 286 residue cytoplasmic domain. A soluble IL-2 R β (IL-2 sR β) has been identified in the culture supernatants of a human lymphoid cell line, YT, that displays IL-2 R β . At present, the function of IL-2 sR β is unclear. Recombinant human IL-2 sR β 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, IL-2 sR β binds IL-15 with sufficient affinity to neutralize IL-15 biological activities.

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