

DESCRIPTION

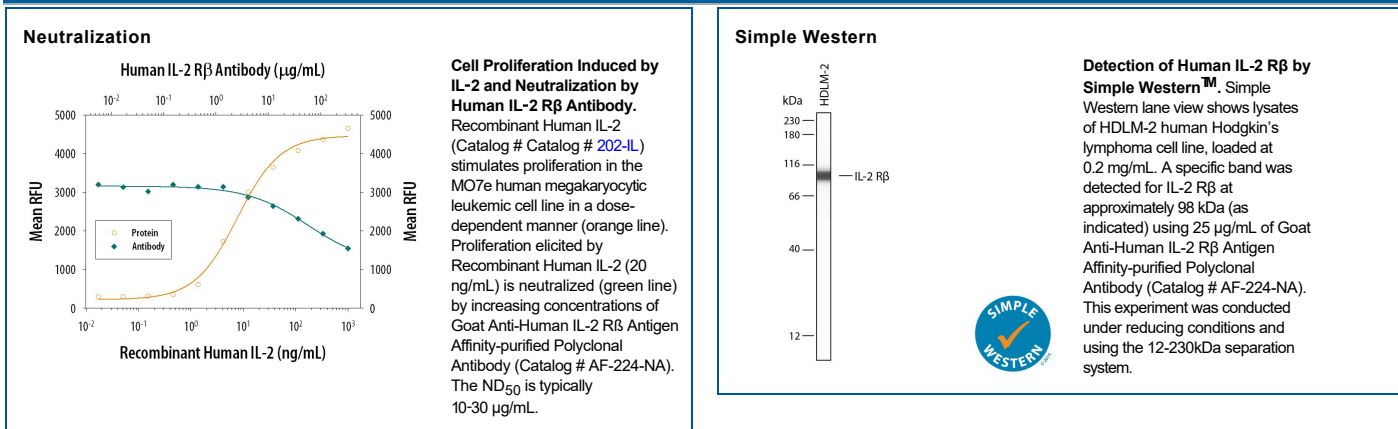
Species Reactivity	Human
Specificity	Detects human IL-2 R β in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) IL-2 R α , recombinant mouse (rm) IL-2 R β , rhIL-2 R γ , and rhIL-15 R is observed. Is also able to block the cell surface of human IL-2 R β mediated bioactivities induced by IL-2. For optimal neutralization of IL-2 biological activity on cells expressing the high affinity IL-2 receptors, the use of anti-IL-2 R α in conjunction with anti-IL-2 R β antibodies is recommended.
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
Endotoxin Level	<0.10 EU per 1 μ g of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

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
Western Blot	0.1 μ g/mL	Recombinant Human IL-2 R β (Catalog # 224-2B)
Simple Western	25 μ g/mL	HDLM-2 human Hodgkin's lymphoma cell line
Neutralization	Measured by its ability to neutralize IL-2-induced proliferation in the MO7e human megakaryocytic leukemic cell line. Avanzi, G. <i>et al.</i> (1988) Br. J. Haematol. 69 :359. The Neutralization Dose (ND ₅₀) is typically 10-30 μ g/mL in the presence of 20 ng/mL Recombinant Human IL-2.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.