

DESCRIPTION

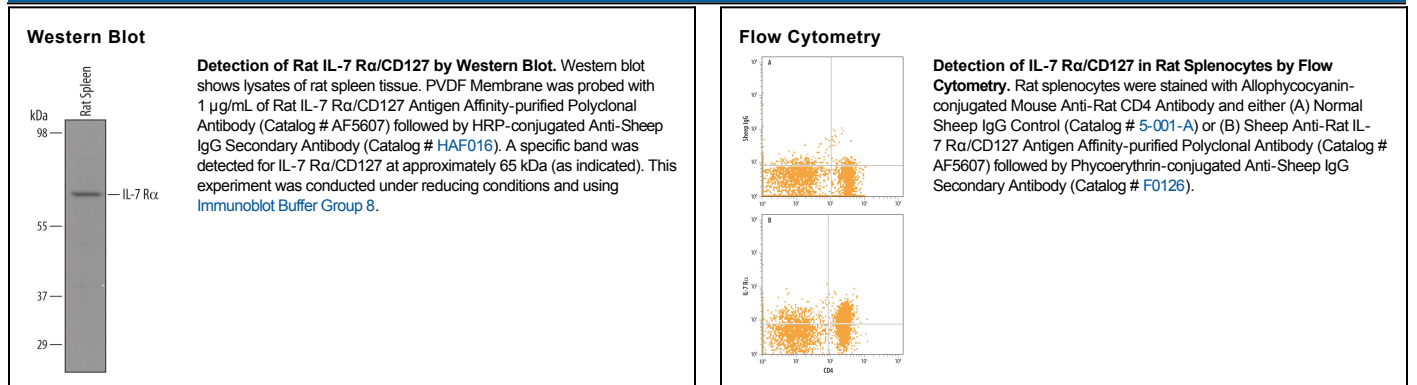
Species Reactivity	Rat
Specificity	Detects rat IL-7 R α /CD127 in direct ELISAs and Western blots. In direct ELISAs, approximately 60% cross-reactivity with recombinant mouse IL-7 R α and less than 10% cross-reactivity with recombinant human IL-7 R α is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat IL-7 R α /CD127 Glu21-Asp239 Accession # NP_001099888
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 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	1 μ g/mL	See Below
Flow Cytometry	2.5 μ g/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

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

IL-7 R α (IL-7 receptor alpha; also CD127) is a 60-70 kDa member of the type I cytokine receptor family of molecules. It is expressed on resting naïve and memory CD8+ T cells, DN thymocytes, pre-B cells, Th1 CD4+ T cells, dendritic cells and monocytes. IL-7 R α heterodimerizes with both the γ c chain to create the IL-7 receptor, and the TSLPR subunit to generate the TSLP receptor. IL-7 R α participates in T cell differentiation, naïve T cell survival, and CD4+ thymocyte proliferation. Mature rat IL-7 R α is a 437 aa type I transmembrane glycoprotein. It contains a 219 aa extracellular region (aa 21-239) that possesses one type III fibronectin domain (aa 129-222), and a 193 aa cytoplasmic tail that shows a key phosphorylation site at Tyr447. Over aa 21-239, rat IL-7 R α shares 79% and 67% aa identity with mouse and human IL-7 R α , respectively.