

DESCRIPTION

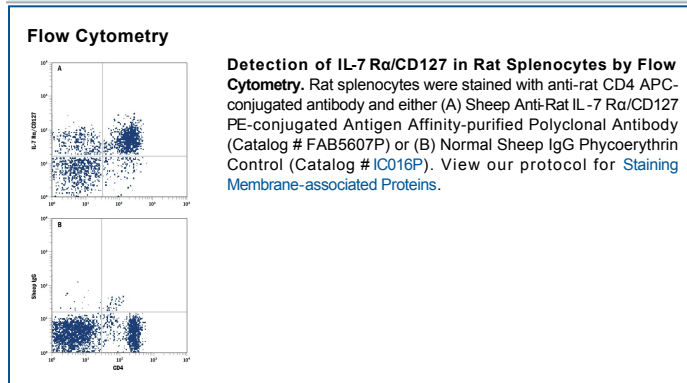
Species Reactivity	Rat
Specificity	Detects rat IL-7 R α /CD127 in direct ELISAs and Western blots. In direct ELISAs, approximately 60% cross-reactivity with recombinant mouse IL-7 R α and less than 10% cross-reactivity with recombinant human IL-7 R α is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat IL-7 R α /CD127 Glu21-Asp239 Accession # NP_001099888
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	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
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



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. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

IL-7 R α (IL-7 Receptor alpha; also known as 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 amino acid (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.