Rat IL-7 Rα/CD127 PE-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 717519

Catalog Number: FAB8484P

25 TESTS

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat IL-7 Rα/CD127 in direct ELISAs.
Source	Monoclonal Mouse IgG_{2A} Clone # 717519
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat IL-7 Rα/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.

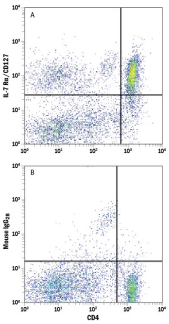
APPLICATIONS

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 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of IL-7 Rα/CD127 in Rat Splenocytes by Flow Cytometry. Rat splenocytes were stained with Anti-Rat CD4 APC-conjugated Antibody and either (A) Mouse Anti-Rat IL-7 Rα/CD127 PE-conjugated Monoclonal Antibody (Catalog # FAB8484P) or (B) Mouse IgG_{2A} Phycoerythrin Isotype Control (Catalog # IC003P). View our protocol for Staining Membrane-associated Proteins.

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

IL-7 Rα (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 Rα heterodimerizes with both the γc chain to create the IL-7 receptor, and the TSLPR subunit to generate the TSLP Receptor. IL-7 Rα participates in T cell differentiation, naïve T cell survival, and $CD4^+$ thymocyte proliferation. Mature rat IL-7 Rα 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 Rα shares 79% and 67% aa identity with mouse and human IL-7 Rα, respectively.