Species Reactivity: Human

Specificity: Detects human IL-21 R in direct ELISAs. In direct ELISAs, this antibody does not cross-react with recombinant human (rh)IL-2 Rβ or rmIL-21 R.

Source: Monoclonal Mouse IgG1, Clone # 152512

Purification: Protein A or G purified from hybridoma culture supernatant

Immunogen: S. frugiperda insect ovarian cell line SF21-derived recombinant human IL-21 R Cys20-Pro236 Accession # Q9HBE5

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/10⁶ cells | See Below |

DATA

Flow Cytometry

Detection of IL-21 R in Human Blood Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Mouse Anti-Human IL-21 R PE-conjugated Monoclonal Antibody (Catalog # FAB9911P) and Mouse Anti-Human CD19 Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB4867F). Quadrant markers were set based on control antibody staining (Catalog # IC002P). 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

Interleukin-21 (IL-21) and its receptor play an important role in the regulation of the immune system. IL-21 R, also called NILR (novel interleukin receptor), is a type I cytokine receptor with 4 conserved cysteine residues and an extracellular WSXWS motif. It is most closely related to IL-2 Rβ, IL-4 Rα, and IL-9 R. The gene for human IL-21 R has been mapped to chromosome 16p12. Human IL-21 R is a 538 amino acid (aa) residue type I transmembrane protein with a 19 aa signal peptide, a 217 aa extracellular domain, a 19 aa transmembrane domain, and a 283 aa cytoplasmic domain. IL-21 R is expressed on lymphoid tissues, peripheral B cells, and cell lines of T, B, and NK lineage. The common γ chain (γc) is required for IL-21 R signaling. The IL-21/IL-21 R interaction appears to play an important role in B and T cell proliferation after antigen stimulation and NK cell maturation.

References: