

## DESCRIPTION

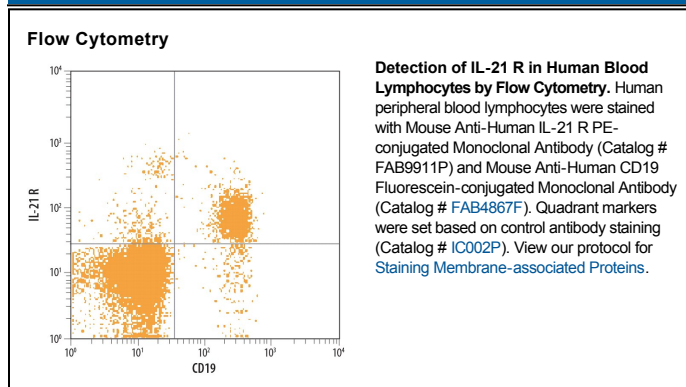
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-21 R in direct ELISAs. In direct ELISAs, this antibody does not cross-react with recombinant human (rh)IL-2 R $\beta$ or rmlIL-21 R.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 152512
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human IL-21 R Cys20-Pro236 Accession # Q9HBE5
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	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
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> 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.**

- 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 R $\beta$ , IL-4 R $\alpha$ , 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  $\gamma$  chain ( $\gamma_c$ ) 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:

1. Parrish-Novak, *et al.* (2000) *Nature* **408**:57.
2. Ozaki, K. *et al.* (2000) *Proc. Natl. Acad. Sci. USA* **97**:11439.
3. Dumoutier, L. *et al.* (2000) *Proc. Natl. Acad. Sci. USA* **97**:10144.
4. Asao, H. *et al.* (2001) *J. Immunol.* **167**:1.