

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IL-21 R in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody does not cross-react with recombinant mouse IL-21 R.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 152504
<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>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	Recombinant Human IL-21 R Subunit Fc Chimera (Catalog # 991-R2)

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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 (γ<sub>c</sub>) 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.