Mouse IL-21 R Antibody

Monoclonal Rat IgG_1 Clone # 155502

Catalog Number: MAB596

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-21 R in direct ELISAs and Western blots. Does not cross-react with recombinant human IL-21 R.
Source	Monoclonal Rat IgG_1 Clone # 155502
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant mouse IL-21 R Leu21-Pro236 Accession # Q9JHX3
Formulation	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.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Mouse IL-21 R Subunit Fc Chimera (Catalog # 596-MR)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The interleukin-21 (IL-21) and its receptor appear to play important roles 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 and IL-4 Rα. Mouse IL-21 R is a 529 amino acid (aa) residue protein with a 19 aa signal peptide, a 217 aa extracellular domain, an 18 aa transmembrane domain, and a 275 aa cytoplasmic domain. Mouse and human IL-21 R share 62% aa identity. IL-21 R is expressed on lymphoid tissues, peripheral B cells, and cell lines of T, B and natural killer lineage. Although not fully elucidated, the IL-2 Rγ (γ_c) chain appears to play a role in IL-21 R signaling. The IL-21/IL-21 R interaction appears to play important roles in B and T cell proliferation after antigen stimulation and natural killer cell maturation.

References:

1. Parrish-Novak, J. *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.

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