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ProductInformation

Anti-Interluekin-21 Receptor, N-Terminal
Developed in Rabbit

Product Number **I 5532**

Product Description

Anti-Interleukin-21 Receptor (IL-21R), N-Terminal is developed in rabbit using a synthetic peptide (CPDLVCYTDYLQT) corresponding to amino acids 20-32 of human IL-21R precursor[1] as immunogen. The antibody is purified by immunoaffinity chromatography.

Anti-Interleukin-21 Receptor (IL-21R), N-Terminal recognizes human IL-21R (approximately 60 kDa) by immunoblotting.

Interleukin-21 (IL-21) is a novel cytokine related to IL-2 and IL-15, and it plays a role in the proliferation and maturation of NK (natural killer), B, and T cell populations. The receptor for IL-21 (IL-21R), also termed NILR for novel interleukin receptor) is a member of the class I cytokine receptor family.[1, 2] IL-21R contains extracellualr and intracellular structural motifs.[3] The extracellular motifs include a single cytokine recognition module, two pairs of conserved cysteine residues, and a 'WSXWS' motif. The intracellular domain contains strong intracellular signaling motifs, including classical box 1 and box 2 motifs. IL-21R forms a complex with the common cytokine receptor γ chain, γ_c, and mediates IL-21 signaling.[4, 5] Both IL-21R and the γ_c are necessary for the IL-21 function. IL-21 and its receptor activate the JAK-STAT signaling pathway. IL-21R is expressed in spleen, thymus, NK, T and B cell lines.

Reagent

Anti-Interleukin-21 Receptor (IL-21R), N-Terminal is supplied as approximately 0.5 mg/ml of antibody in phosphate buffered saline containing 0.02% sodium azide.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) has been sent to the attention of the safety officer at your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Do not store in a "frost-free" freezer. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

For immunoblotting, the recommended working antibody concentration is 0.5-1 µg/ml using human Raji (lymphoblastic leukemia) and A431 (epidermoid carcinoma) cell lysates.

Note: In order to obtain the best results and assay sensitivities in various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

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3. Gurney, a.L., et al., Distinct regions of c-Mpl cytoplasmic domain are coupled to the JAK-STST signal transduction pathway and Shc phosphorylation. Proc. Natl. Acad. Sci. USA, **92**, 5292-5296 (1995).
4. Asao, H., et al., The common γ-chain is an indispensabel subunit of the IL-21 receptor complex. J. Immunol., **167**, 1-5 (2001).
5. Vosshenrich, C.A., et al., IL-21 joins the γ_c-dependent network? Curr. Biol., **11**, R175-R177 (2001).

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