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Product Information

Anti-Interleukin-21, Intracellular Domain produced in rabbit, affinity isolated antibody

Catalog Number I5282

Synonym: Anti-IL-21

Product Description

Anti-Interleukin-21, Intracellular Domain is produced in rabbit using as immunogen a synthetic peptide (TCPSCDSYEKKPPKE) corresponding to amino acids 121-135 of human IL-21 precursor¹. The antibody is purified by immunoaffinity chromatography.

Anti-Interleukin-21, Intracellular Domain recognizes human IL-21, ~18 kDa, by immunoblotting.

Interleukin-21 (IL-21) is a novel cytokine with significant homology to IL-2, IL-4, and IL-15. The receptor for IL-21 (IL-21R), also termed NILR for novel interleukin receptor, $^{1,\,2}$ forms a complex with IL-2 R γ (γ_c) and mediates IL-21 signaling. $^{3,\,4}$ Together, IL-21 and its receptor (IL-21R) appear to have important roles in the regulation of the immune system. This complex regulates the proliferation and maturation of NK (natural killer), B, and T cell populations. IL-21 and its receptor activate the JAK-STAT signaling pathway. IL-21 is expressed in activated T cells, and HL-60 and THP-1 cell lines.

Reagent

Supplied at ~0.5 mg/ml in phosphate buffered saline containing 0.02% sodium azide.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Antibody can be stored at 2-8 °C for three months and at -20 °C for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Product Profile

 $\underline{Immunoblotting} : the recommended working antibody concentration is 0.5-1 $\mu g/ml$ using human HL-60 (human leukemia) and THP-1 (monocyte-like) 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

- Parrish-Novak, J., et al., Interleukin 21 and its receptor are involved in NK cell expansion and regulation of lymphocyte function. *Nature*, 408, 57-63 (2000).
- Ozaki, K., et al., Cloning of a type I cytokine receptor most related to the IL-2 receptor β chain. *Proc. Natl. Acad. Sci. USA.*, 97, 11439-11444 (2000).
- Asao, H., et al., The common γ-chain is an indispensabel subunit of the IL-21 receptor complex. *J. Immunol.*, 167, 1-5 (2001).
- 4. Vosshenrich, C.A., et al., IL-21 joins the γ_c -dependent network? *Curr. Biol.*, **11**, R175-R177 (2001).

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