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IL-21 Antibody
Catalog # ASC10142

Specification

IL-21 Antibody - Product Information

Application	**WB, ICC**
Primary Accession	Q9HBE4
Other Accession	NP_068575, 11141875
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 18 kDa** **Observed: 18 kDa KDa**
Application Notes	**IL-21 antibody can be used for detection of IL-21 by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 2 µg/mL.**

IL-21 Antibody - Additional Information

Gene ID **59067**

Other Names
IL-21 Antibody: Za11, IL-21, Interleukin-21, Za11, interleukin 21

Target/Specificity
IL21; At least two isoforms of IL-21 are known to exist; this antibody will detect both isoforms. IL-21 antibody is predicted to not cross-react with other members of the interleukin protein family.

Reconstitution & Storage
IL-21 antibody can be stored at 4℃ for three months and -20℃, stable for up to 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.

Precautions
IL-21 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IL-21 Antibody - Protein Information

Name IL21 (HGNC:6005)

Function
Cytokine with immunoregulatory activity. May promote the transition between innate and adaptive immunity. Induces the production of IgG(1) and IgG(3) in B-cells (By similarity). Implicated in the generation and maintenance of T follicular helper (Tfh) cells and the formation of germinal-centers. Together with IL6, control the early generation of Tfh cells and are critical for an effective antibody response to acute viral infection (By similarity). May play a role in proliferation

and maturation of natural killer (NK) cells in synergy with IL15. May regulate proliferation of mature B- and T-cells in response to activating stimuli. In synergy with IL15 and IL18 stimulates interferon gamma production in T-cells and NK cells (PubMed:11081504, PubMed:15178704). During T-cell mediated immune response may inhibit dendritic cells (DC) activation and maturation (By similarity).

Cellular Location
Secreted.

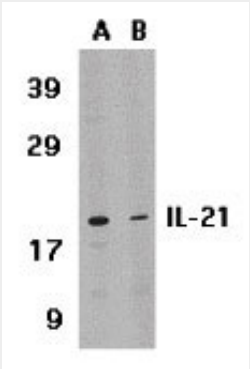
Tissue Location
Expressed in activated CD4-positive T-cells but not in CD8-positive T-cells, B-cells, or monocytes

IL-21 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

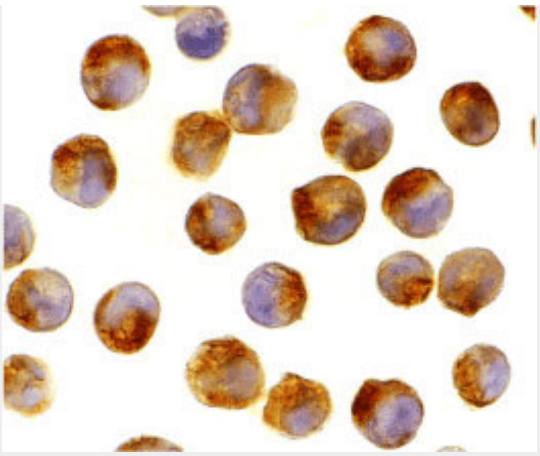
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL-21 Antibody - Images



Western blot analysis of IL-21 expression in HL-60 cell lysate in (A) the absence or (B) the presence of blocking peptide with IL-21 antibody at 1 µg /ml.

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Immunocytochemistry of IL-21 in K562 cells with IL-21 antibody at 2 µg/mL.

IL-21 Antibody - Background

IL-21 Antibody: A novel cytokine was recently identified in human and mouse and designated IL-21, which has significant homology to IL-2, IL-4, and IL-15. The receptor for IL-21 (IL-21R, also termed NILR for novel Interleukin receptor) is a new member of the class I cytokine receptor family. IL-21R forms a complex with the common cytokine receptor gamma chain, gammac, and mediates IL-21 signaling. IL-21 and its receptor activate JAK-STAT signaling pathway. IL-21 is expressed in activated T cells, and HL-60 and THP-1 cell lines. IL-21 plays a role in the proliferation and maturation of NK, B and T cell populations.

IL-21 Antibody - References

Parrish-Novak J, Dillon SR, Nelson A, et al. Interleukin 21 and its receptor are involved in NK cell expansion and regulation of lymphocyte function. Nature 2000; 408:57-63.
Ozaki K, Kikly K, Michalovich D, et al. Cloning of a type I cytokine receptor most related to the IL-2 receptor β chain. Proc. Natl. Acad. Sci. USA. 2000; 97:11439-44.
Asao H, Okuyama C, Kumaki S, et al. The common γ-chain is an indispensable subunit of the IL-21 receptor complex. J. Immunol. 2001; 167:1-5.