

**IL-21 Antibody**  
Catalog # ASC10142**Specification**

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**IL-21 Antibody - Product Information**

|                   |  |
|-------------------|--|
| Application       | WB, ICC  |
| Primary Accession | <a href="#">O9HBE4</a>   |
| Other Accession   | <a href="#">NP_068575</a> , <a href="#">11141875</a>   |
| Reactivity        | Human  |
| Host              | Rabbit   |
| Clonality         | Polyclonal   |
| Isotype           | IgG  |
| Calculated MW     | Predicted: 18 kDa  |
| Application Notes | Observed: 18 kDa KDa<br>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 |
| <b>Other Names</b>  |       |
| 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°C for three months and -20°C, 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:<a href="http://www.uniprot.org/citations/11081504" target="\_blank">11081504</a>, PubMed:<a href="http://www.uniprot.org/citations/15178704" target="\_blank">15178704</a>). During T-cell mediated immune response may inhibit dendritic cells (DC) activation and maturation (By similarity).

#### Cellular Location

Secreted.

#### Tissue Location

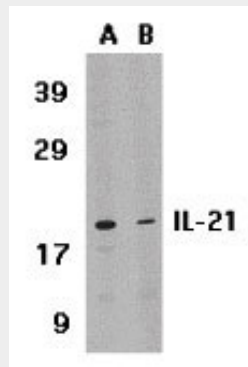
Expressed in activated CD4-positive T-cells but not in CD8-positive T-cells, B-cells, or monocytes

### IL-21 Antibody - Protocols

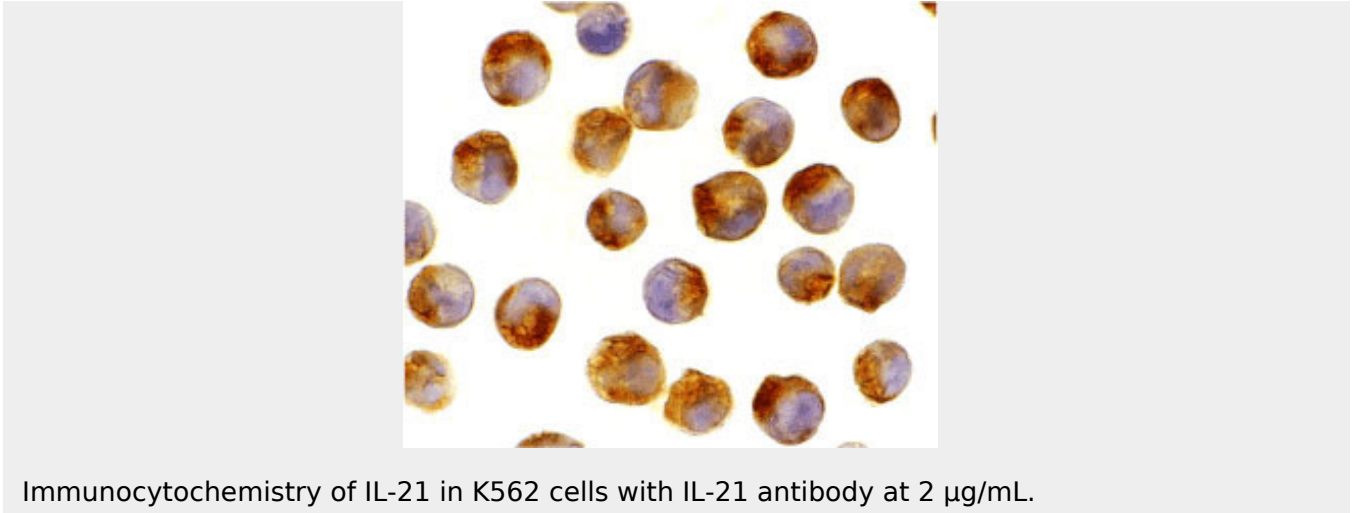
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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.



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  $\beta$  chain. *Proc. Natl. Acad. Sci. USA.* 2000; 97:11439-44.  
Asao H, Okuyama C, Kumaki S, et al. The common  $\gamma$ -chain is an indispensable subunit of the IL-21 receptor complex. *J. Immunol.* 2001; 167:1-5.