

## Anti-IL-21

**CATALOG No.:** PX204A      SIZE: 100 µg  
PX204B      SIZE: 0.5 mg

### BACKGROUND:

A novel cytokine was recently identified in human and mouse and designated IL-21 (1), 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 (1,2). IL-21R forms a complex with the common cytokine receptor  $\gamma$  chain,  $\gamma_c$ , and mediates IL-21 signaling (3,4). 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.

### SOURCE:

Rabbit anti-IL-21 polyclonal antibody was raised against a synthetic peptide (TCPSCDSYEKKPPKE) corresponding to amino acids 121 to 135 of human IL-21 precursor (1).

### APPLICATION:

This antibody can be used for detection of IL-21 by Western blot at 0.5 to 1 µg/ml. Human HL-60 and THP-1 cell lysates can be used as positive control and an approximately 18 kDa band can be detected.

**For research use only.**

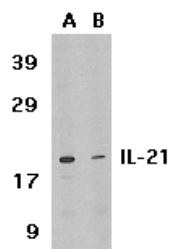
### STORAGE:

It is supplied as immunoaffinity purified IgG, 100 µg in 200 µl of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.

### RELATED PRODUCTS:

Blocking peptide, 50 µg at 200 µg/ml, is available for competition studies.

Human HL-60 cell lysate, 200 µg at 2 mg/ml, is available for positive control.



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

### REFERENCES:

1. arrish-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(6808):57-63.
2. 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(21):11439-44.
3. 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):1-5.
4. Vosschenrich CA, Di Santo JP. Cytokines: IL-21 joins the gamma(c)-dependent network? *Curr Biol*. 2001;11(5):R175-7.

**CAUTION:** NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.



**Cell Sciences, Inc.**  
1504 Providence Highway  
Unit 11B  
Norwood, MA 02062

Toll Free: 888 769-1246  
Phone: 781 769-0610  
Fax: 781 769-0542

E-mail: [info@cellsciences.com](mailto:info@cellsciences.com)  
Web Site: [www.cellsciences.com](http://www.cellsciences.com)