abcam

Product datasheet

Anti-IL-21 antibody ab5978

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Overview **Product name** Anti-IL-21 antibody Description Rabbit polyclonal to IL-21 **Host species** Rabbit **Tested applications** Suitable for: ICC/IF. WB **Species reactivity** Reacts with: Human Predicted to work with: Cow, Dog, Pig Synthetic peptide corresponding to Human IL-21 aa 121-135. Immunogen Sequence: TCPSCDSYEKKPPKE Database link: Q9HBE4 (Peptide available as ab6025, ab6680) Run BLAST with Run BLAST with **General notes** 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 g chain, gc, 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. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term. Avoid freeze /

	thaw cycle.
Storage buffer	pH: 7.2
	Preservative: 0.02% Sodium azide
Purity	Immunogen affinity purified
Primary antibody notes	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 g chain, gc, 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.
Clonality	Polyclonal
lsotype	lgG

Applications

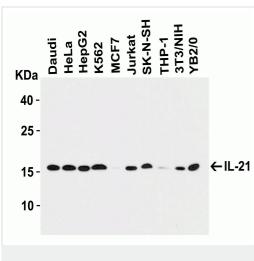
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab5978 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 2 µg/ml.
WB	★★★★	Use a concentration of 0.5 - 1 μ g/ml. Detects a band of approximately 18 kDa.

Target	
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). 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. During T-cell mediated immune response may inhibit dendritic cells (DC) activation and maturation.
Tissue specificity	Expressed in activated CD4-positive T-cells but not in CD8-positive T-cells, B-cells, or monocytes.
Sequence similarities	Belongs to the IL-15/IL-21 family.
Cellular localization	Secreted.

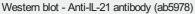
Images



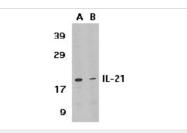
All lanes : Anti-IL-21 antibody (ab5978) at 1 $\mu g/mL$, 1h incubation at RT in 5% NFM/TBST.

Loading: 15 µg of lysates per lane.

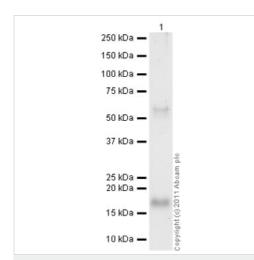
Secondary: Goat anti-rabbit IgG HRP conjugate at 1/10000 dilution.



Western blot - Anti-IL-21 antibody (ab5978)



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 ab5978 at 1 μ g /ml. 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 ab5978 at 1 μ g /ml.



Western blot - Anti-IL-21 antibody (ab5978)

Anti-IL-21 antibody (ab5978) at 1 μg/ml + Recombinant human IL-21 protein (**ab73250**) at 0.1 μg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (<u>ab97080</u>) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Exposure time: 8 minutes



ab5978 at 2ug/ml staining of IL21 in K562 cells.

IL-21 antibody (ab5978)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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