

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
Immunogen	Synthetic peptide corresponding to Human IL-21 aa 121-135. Sequence: TCPSCDSYEKKPPKE Database link: Q9HBE4 (Peptide available as ab6025 , ab6680) Run BLAST with Run BLAST with
Positive control	<div style="border: 1px solid #ccc; padding: 5px; background-color: #f9f9f9;"> Purchase matching WB positive control: Recombinant human IL-21 protein > </div>
General notes	<p>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 NLR 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.</p> <p>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.</p> <p>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</p>

Properties

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 γ chain, γc , 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
Isotype	IgG

Applications

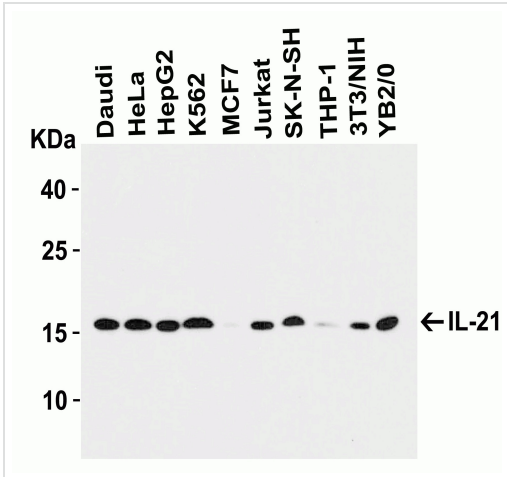
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab5978 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 2 μ g/ml.
WB	★★★★★ (1)	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

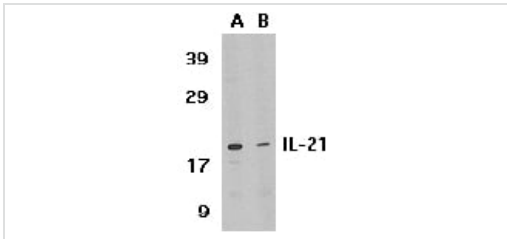


Western blot - Anti-IL-21 antibody (ab5978)

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

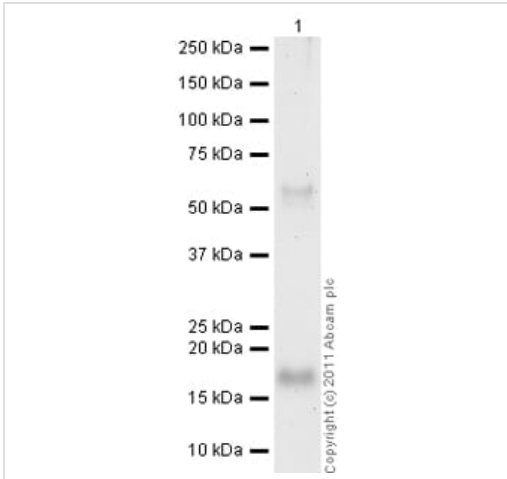
Loading: 15 µg of lysates per lane.

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 µg /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 µg /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

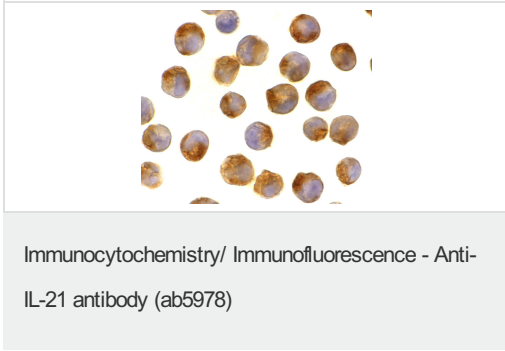
Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) 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.

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

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