

**Anti-IL13 Picoband Antibody**  
Catalog # ABO10015

**Specification**

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**Anti-IL13 Picoband Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P35225</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Interleukin-13(IL13) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-IL13 Picoband Antibody - Additional Information**

**Gene ID** 3596

**Other Names**

Interleukin-13, IL-13, IL13, NC30

**Calculated MW**

15816 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Secreted.

**Protein Name**

Interleukin-13

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E. coli-derived human IL13 recombinant protein (Position: P36-N146). Human IL13 shares 55.3% and 61.9% amino acid (aa) sequence identity with mouse and rat IL13, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-IL13 Picoband Antibody - Protein Information****Name** IL13**Synonyms** NC30**Function**

Cytokine that plays important roles in allergic inflammation and immune response to parasite infection (PubMed: [8096327](http://www.uniprot.org/citations/8096327), PubMed: [8097324](http://www.uniprot.org/citations/8097324) target="\_blank">8097324</a>). Synergizes with IL2 in regulating interferon-gamma synthesis (PubMed: [8096327](http://www.uniprot.org/citations/8096327) target="\_blank">8096327</a>). Stimulates B-cell proliferation, and activation of eosinophils, basophils, and mast cells (PubMed: [7903680](http://www.uniprot.org/citations/7903680) target="\_blank">7903680</a>, PubMed: [8759755](http://www.uniprot.org/citations/8759755) target="\_blank">8759755</a>). Plays an important role in controlling IL33 activity by modulating the production of transmembrane and soluble forms of interleukin-1 receptor-like 1/IL1RL1 (By similarity). Displays the capacity to antagonize Th1-driven proinflammatory immune response and downregulates synthesis of many proinflammatory cytokines including IL1, IL6, IL10, IL12 and TNF-alpha through a mechanism that partially involves suppression of NF-kappa-B (By similarity). Functions also on nonhematopoietic cells, including endothelial cells where it induces vascular cell adhesion protein 1/VCAM1, which is important in the recruitment of eosinophils (PubMed: [8639787](http://www.uniprot.org/citations/8639787) target="\_blank">8639787</a>). Exerts its biological effects through its receptors which comprises the IL4R chain and the IL13RA1 chain, to activate JAK1 and TYK2, leading to the activation of STAT6 (PubMed: [9013879](http://www.uniprot.org/citations/9013879) target="\_blank">9013879</a>). Aside from IL13RA1, another receptor IL13RA2 acts as a high affinity decoy for IL13 and mediates internalization and depletion of extracellular IL13 (PubMed: [21622864](http://www.uniprot.org/citations/21622864) target="\_blank">21622864</a>).

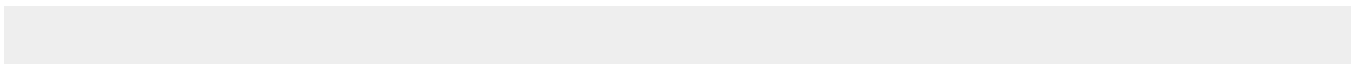
**Cellular Location**

Secreted.

**Anti-IL13 Picoband 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](#)

**Anti-IL13 Picoband Antibody - Images**

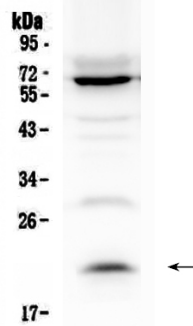


Figure 1. Western blot analysis of IL13 using anti-IL13 antibody (ABO10015). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: K562 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-IL13 antigen affinity purified polyclonal antibody (Catalog # ABO10015) at 0.5  $\mu$ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for IL13 at approximately 20KD. The expected band size for IL13 is at 16KD.

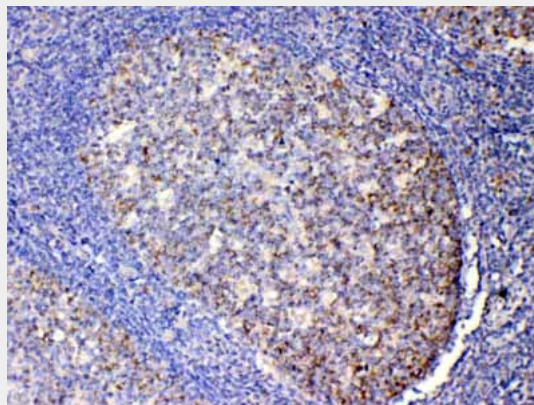


Figure 2. IHC analysis of IL13 using anti-IL13 antibody (ABO10015). IL13 was detected in paraffin-embedded section of human tonsil tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1  $\mu$ g/ml rabbit anti-IL13 Antibody (ABO10015) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

### Anti-IL13 Picoband Antibody - Background

Interleukin 13 is a protein that in humans is encoded by the IL-13 gene. It is a kind of cytokine secreted by many cell types, but especially T helper type 2 (Th2) cells, which is an important mediator of allergic inflammation and disease. The IL-13 gene is mapped to 5q23-q31. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4

receptor (IL-4R $\beta$ ) and at least one of two known IL-13-specific binding chains. Furthermore, this gene acts more prominently as a molecular bridge linking allergic inflammatory cells to the non-immune cells in contact with them, thereby altering physiological function.