

### IL13 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13737b

### Specification

# IL13 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region IF, WB, IHC-P,E <u>P35225</u> <u>NP\_002179.2</u> Human Rabbit Polyclonal Rabbit IgG 118-146

## IL13 Antibody (C-term) - Additional Information

Gene ID 3596

Other Names Interleukin-13, IL-13, IL13, NC30

#### Target/Specificity

This IL13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 118-146 amino acids from the C-terminal region of human IL13.

**Dilution** IF~~1:10~50 WB~~1:1000 IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** 

IL13 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## IL13 Antibody (C-term) - Protein Information

Name IL13

Synonyms NC30



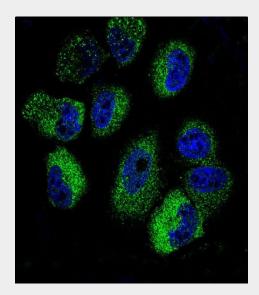
**Function** Cytokine that plays important roles in allergic inflammation and immune response to parasite infection (PubMed:<u>8096327</u>, PubMed:<u>8097324</u>). Synergizes with IL2 in regulating interferon-gamma synthesis (PubMed:<u>8096327</u>). Stimulates B-cell proliferation, and activation of eosinophils, basophils, and mast cells (PubMed:<u>7903680</u>, PubMed:<u>8759755</u>). 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:<u>8639787</u>). 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:<u>9013879</u>). Aside from IL13RA1, another receptor IL13RA2 acts as a high affinity decoy for IL13 and mediates internalization and depletion of extracellular IL13 (PubMed:<u>21622864</u>).

Cellular Location Secreted.

## IL13 Antibody (C-term) - Protocols

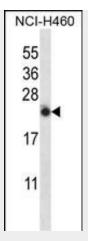
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- IL13 Antibody (C-term) Images

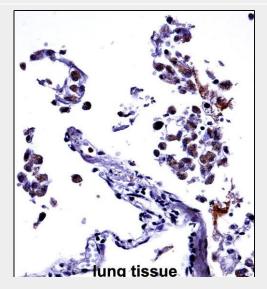


Confocal immunofluorescent analysis of IL13 Antibody (C-term) (Cat#AP13737b) with NCI-H460 cell line followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).





IL13 Antibody (C-term) (Cat. #AP13737b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the IL13 antibody detected the IL13 protein (arrow).



IL13 Antibody (C-term) (AP13737b)immunohistochemistry analysis in formalin fixed and paraffin embedded human lung tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of IL13 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

## IL13 Antibody (C-term) - Background

This gene encodes an immunoregulatory cytokine produced primarily by activated Th2 cells. This cytokine is involved in several stages of B-cell maturation and differentiation. It up-regulates CD23 and MHC class II expression, and promotes IgE isotype switching of B cells. This cytokine down-regulates macrophage activity, thereby inhibits the production of pro-inflammatory cytokines and chemokines. This cytokine is found to be critical to the pathogenesis of allergen-induced asthma but operates through mechanisms independent of IgE and eosinophils. This gene, IL3, IL5, IL4, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL4. [provided by RefSeq].

## IL13 Antibody (C-term) - References



Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Shi, X., et al. Anat Rec (Hoboken) 293(9):1470-1476(2010) Beckers, M.M., et al. Eur. J. Intern. Med. 21(4):289-292(2010) Ho-Pun-Cheung, A., et al. Pharmacogenomics J. (2010) In press : Zhao, M., et al. J. Biomed. Biotechnol. 2010, 931018 (2010) :