

IL13 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13737b

Product Information

Application WB, IF, IHC-P, E

Primary Accession P35225 **Other Accession** NP 002179.2 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB33718 **Calculated MW** 15788 118-146 **Antigen Region**

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 WB~~1:1000 IF~~1:10~50 IHC-P~~1:100~500 E~~Use at an assay dependent

concentration.

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.

Protein Information

Name IL13

Synonyms NC30

Function Cytokine that plays important roles in allergic inflammation and immune

response to parasite infection (PubMed:8096327, PubMed:8097324). Synergizes with IL2 in regulating interferon-gamma synthesis (PubMed:8096327). Stimulates B-cell proliferation, and activation of eosinophils, basophils, and mast cells (PubMed:7903680, PubMed:8759755). 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). Also functions 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: 9013879). Aside from IL13RA1, another receptor IL13RA2 acts as a high affinity decoy for IL13 and mediates internalization and depletion of extracellular IL13 (PubMed:21622864).

Cellular Location

Secreted.

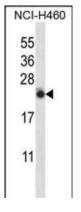
Background

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].

References

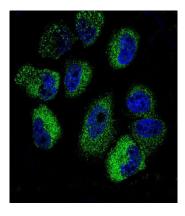
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Shi, X., et al. Anat Rec (Hoboken) 293(9):1470-1476(2010) Beckers, M.M., et al. Eur. J. Intern. Med. 21(4):289-292(2010) Ho-Pun-Cheung, A., et al. Pharmacogenomics J. (2010) In press: Zhao, M., et al. J. Biomed. Biotechnol. 2010, 931018 (2010):

Images

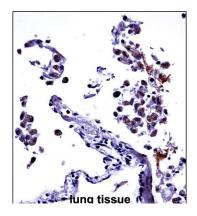


IL13 Antibody (C-term) (Cat. #AP13737b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the IL13 antibody detected the IL13 protein (arrow).

Confocal immunofluorescent analysis of IL13 Antibody (C-term) (Cat#AP7989b) with AP13737b cell followed by



Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.