

**IL4 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5241B**

**Specification**

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**IL4 Antibody (C-term) - Product Information**

Application	<b>WB, IHC-P, FC,E</b>
Primary Accession	<a href="#">P05112</a>
Other Accession	<a href="#">P79339</a> , <a href="#">P30368</a>
Reactivity	<b>Human, Mouse</b>
Predicted	<b>Monkey, Sheep</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>122-151</b>

**IL4 Antibody (C-term) - Additional Information**

**Gene ID** 3565

**Other Names**

Interleukin-4, IL-4, B-cell stimulatory factor 1, BSF-1, Binetrakin, Lymphocyte stimulatory factor 1, Pitrakinra, IL4

**Target/Specificity**

This L4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 122-150 amino acids from the C-terminal region of human L4.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50  
FC~~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**

IL4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**IL4 Antibody (C-term) - Protein Information**

**Name** IL4

**Function** Cytokine secreted primarily by mast cells, T-cells, eosinophils, and basophils that plays a role in regulating antibody production, hematopoiesis and inflammation, and the development of effector T-cell responses (PubMed:[1993171](#), PubMed:[3016727](#)). Induces the expression of class II MHC molecules on resting B-cells. Enhances both secretion and cell surface expression of IgE and IgG1 (PubMed:[1993171](#)). Regulates also the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes (PubMed:[2521231](#)). Positively regulates IL31RA expression in macrophages. Stimulates autophagy in dendritic cells by interfering with mTORC1 signaling and through the induction of RUFY4. In addition, plays a critical role in higher functions of the normal brain, such as memory and learning (By similarity). Upon binding to IL4, IL4R receptor dimerizes either with the common IL2R gamma chain/IL2RG to produce the type 1 signaling complex, located mainly on hematopoietic cells, or with the IL13RA1 to produce the type 2 complex, which is expressed also on nonhematopoietic cells (PubMed:[10219247](#), PubMed:[11526337](#), PubMed:[18243101](#)). Engagement of both types of receptors initiates JAK3 and to a lower extent JAK1 phosphorylation leading to activation of the signal transducer and activator of transcription 6/STAT6 (PubMed:[7721895](#)).

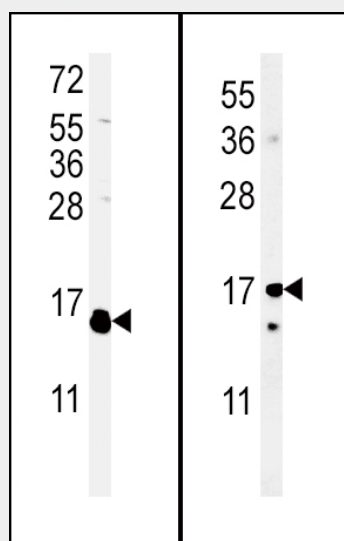
**Cellular Location**  
 Secreted.

### IL4 Antibody (C-term) - Protocols

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

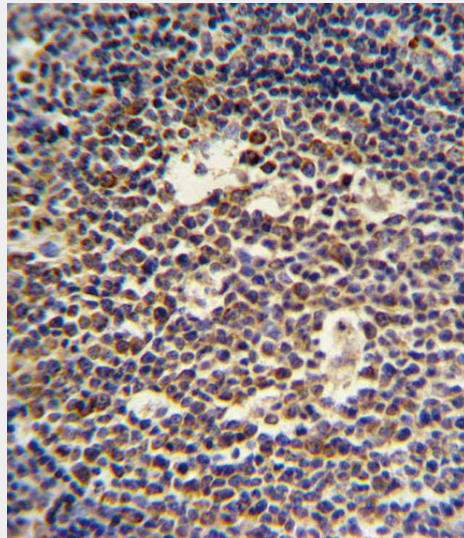
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### IL4 Antibody (C-term) - Images

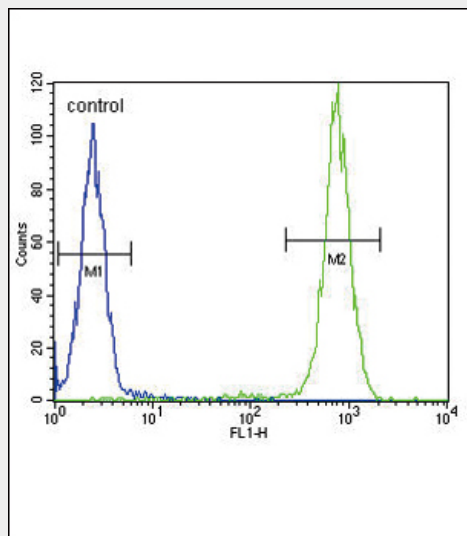


(LEFT)Western blot analysis of IL4 Antibody (C-term) (Cat. #AP5241b) in WiDr cell line lysates (35ug/lane).IL4 (arrow) was detected using the purified Pab.(RIGHT)Western blot analysis of IL4 Antibody (C-term) (Cat. #AP5241b) in mouse cerebellum cell line lysates (35ug/lane).IL4(arrow)

was detected using the purified Pab.



IL4 Antibody (C-term) (Cat. #AP5241b) IHC analysis in formalin fixed and paraffin embedded tonsil followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the IL4 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



IL4 Antibody (C-term) (Cat. #AP5241b) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **IL4 Antibody (C-term) - Background**

IL4 is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome.

#### **IL4 Antibody (C-term) - References**

Wong, H.L., et al. AIDS 24(7):1025-1033(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010)  
Trajkov, D., et al. Indian J Tuberc 56(3):117-131(2009)

**IL4 Antibody (C-term) - Citations**

- [Nasal IL-4\(+\)CXCR5\(+\)CD4\(+\) T follicular helper cell counts correlate with local IgE production in eosinophilic nasal polyps.](#)
- [A SnoRNA-derived piRNA interacts with human interleukin-4 pre-mRNA and induces its decay in nuclear exosomes.](#)