

**Anti-IL-4 Antibody**  
**Rabbit polyclonal antibody to IL-4**  
**Catalog # AP59588****Specification**

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**Anti-IL-4 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P05112</a>
Reactivity	<b>Human, Monkey</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>17492</b>

**Anti-IL-4 Antibody - Additional Information****Gene ID** 3565**Other Names**

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

**Target/Specificity**

Recognizes endogenous levels of IL-4 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-IL-4 Antibody - 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](http://www.uniprot.org/citations/1993171)), PubMed: [3016727](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/1993171)). Regulates also the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes (PubMed: [2521231](http://www.uniprot.org/citations/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:<a href="http://www.uniprot.org/citations/10219247" target="\_blank">10219247</a>, PubMed:<a href="http://www.uniprot.org/citations/11526337" target="\_blank">11526337</a>, PubMed:<a href="http://www.uniprot.org/citations/18243101" target="\_blank">18243101</a>). 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:<a href="http://www.uniprot.org/citations/7721895" target="\_blank">7721895</a>).

### Cellular Location

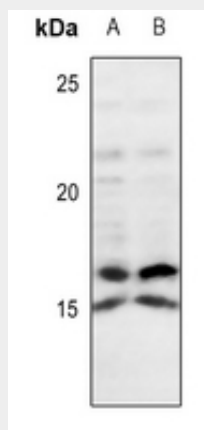
Secreted.

### Anti-IL-4 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-IL-4 Antibody - Images



Western blot analysis of IL-4 expression in A375 (A), H1688 (B) whole cell lysates.

### Anti-IL-4 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human IL-4. The exact sequence is proprietary.