

**IL-4 Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10850****Specification**

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**IL-4 Antibody - Product Information**

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

**IL-4 Antibody - Additional Information****Gene ID 3565**

Positive Control Application & Usage	<b>Recombinant human IL-4 Western blot analysis (0.5-4 µg/ml). However, the optimal conditions should be determined individually.</b>
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**Other Names**

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

**Target/Specificity**

IL-4

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

200 µg (0.5 mg/ml) affinity purified rabbit anti-IL-4 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

IL-4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## 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:<a href="http://www.uniprot.org/citations/1993171" target="\_blank">1993171</a>, PubMed:<a href="http://www.uniprot.org/citations/3016727" target="\_blank">3016727</a>). Induces the expression of class II MHC molecules on resting B-cells. Enhances both secretion and cell surface expression of IgE and IgG1 (PubMed:<a href="http://www.uniprot.org/citations/1993171" target="\_blank">1993171</a>). Regulates also the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes (PubMed:<a href="http://www.uniprot.org/citations/2521231" target="\_blank">2521231</a>). 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.

## 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](#)

## IL-4 Antibody - Images

## IL-4 Antibody - Background

IL-4 is a potent lymphoid cell growth factor that stimulates the growth and survivability of certain B cells and T cells. Human IL-4 is a 15.0 kDa globular protein containing 130 amino acid residues.