

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

IL-4 Antibody - Product Information

Application	WB
Primary Accession	P05112
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	17492

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

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

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: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). Also regulates 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 also expressed 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.

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.