

# **Anti-IL-4 Antibody**

Rabbit polyclonal antibody to IL-4 Catalog # AP59588

# **Specification**

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

Application WB, IP
Primary Accession P05112
Reactivity Human, Monkey
Host Rabbit
Clonality Polyclonal
Calculated MW 17492

# **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) IP~~N/A

# **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:<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>/a>). Also regulates 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 also expressed 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 extend 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>/a>).

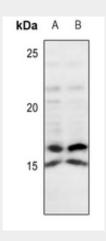
Cellular Location Secreted.

# **Anti-IL-4 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- 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.