

# **IL4 Antibody**

Rabbit mAb Catalog # AP91185

### **Specification**

#### **IL4 Antibody - Product Information**

Application WB, ICC
Primary Accession P05112
Clonality Monoclonal

**Other Names** 

BCGF1; Binetrakin; BSF1; IGG1 induction factor; IL4; II4e12;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 17492 Da

# **IL4 Antibody - Additional Information**

Dilution WB~~1:1000

ICC~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

IL4

Description Participates in at least several B-cell

activation processes as well as of other cell

types. It is a costimulator of

DNA-synthesis. It induces the expression

of class II MHC molecules on resting

B-cells. It enhances both secretion and cell surface expression of IgE and IgG1. It also regulates the expression of the low affinity

Fc receptor for IgE (CD23) on both

lymphocytes and monocytes.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline ,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

# **IL4 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">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>). Also regulates the expression of the low affinity Fc receptor for IqE (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>).

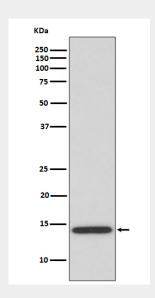
Cellular Location Secreted.

#### **IL4 Antibody - Protocols**

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

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

# **IL4 Antibody - Images**



Western blot analysis of IL4 expression in human tonsil lysate.