

**IL4 Antibody**  
Rabbit mAb  
Catalog # AP91185

## Specification

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### IL4 Antibody - Product Information

Application	WB, ICC
Primary Accession	<a href="#">P05112</a>
Clonality	Monoclonal
<b>Other Names</b>	
BCGF1; Binetrakin; BSF1; IGG1 induction factor; IL4; Il4e12;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	17492 Da

### IL4 Antibody - Additional Information

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:[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:<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>).

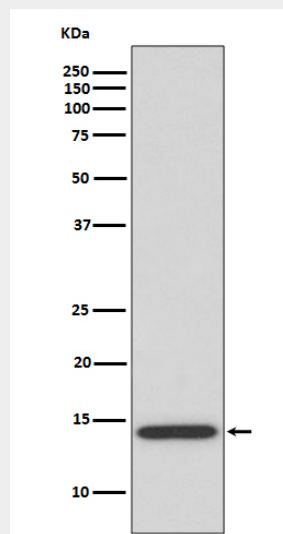
**Cellular Location**  
Secreted.

### IL4 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](#)

### IL4 Antibody - Images



Western blot analysis of IL4 expression in human tonsil lysate.