

#### IL-4 Rabbit mAb

Catalog # AP74836

## **Specification**

#### IL-4 Rabbit mAb - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB
P05112
Human
Rabbit
Monoclonal Antibody
17492

### IL-4 Rabbit mAb - Additional Information

**Gene ID 3565** 

Other Names IL4

**Dilution** WB~~1/500-1/1000

Format Liquid

## IL-4 Rabbit mAb - 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  $href="http://www.uniprot.org/citations/10219247" \ target="\_blank">10219247</a>, PubMed:<a href="http://www.uniprot.org/citations/11526337" target="_blank">11526337</a>, PubMe$ 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.

# IL-4 Rabbit mAb - 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

# IL-4 Rabbit mAb - Images

