

Anti-IL-4 Antibody

Rabbit polyclonal antibody to IL-4
Catalog # AP59588

Product Information

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

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

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](#)).

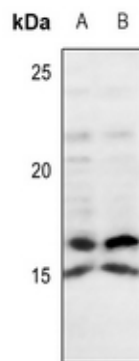
Cellular Location

Secreted.

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human IL-4. The exact sequence is proprietary.

Images



Western blot analysis of IL-4 expression in A375 (A), H1688 (B) whole cell lysates.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.