

Anti-Human IL-4 Antibody [PS00-67] - BSA and Azide free (Capture)

HA721230



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Cap)
Molecular Wt:	Predicted band size: 17.5 kDa
Clone number:	PS00-67

Description: 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. Induces the expression of class II MHC molecules on resting B-cells. Enhances both secretion and cell surface expression of IgE and IgG1. Regulates also the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. 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. 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. 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.

Immunogen: Recombinant full length protein.

Subcellular location: Secreted.

Database links: SwissProt: P05112 Human

Recommended Dilutions:
ELISA(Cap) Use at an assay dependent concentration.

Storage Buffer: PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

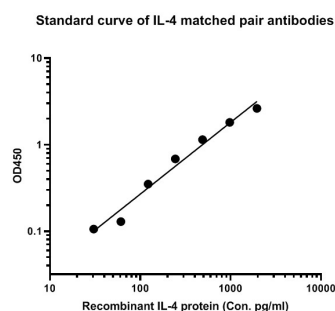


Fig1: Sandwich ELISA analysis of IL-4 matched pair antibodies
Elisa assay was performed by coating wells of a 96-well plate with 50 μ l per well of capture antibody HA721230 [PS00-67] diluted in carbonate/bicarbonate buffer, at a concentration of 1 μ g/mL overnight at 4°C. Wells of the plate were washed, blocked with 150 μ l 1% BSA/PBST blocking buffer, and incubated with serial diluted Recombinant IL-4 protein starting from 2000 pg/ml to 30.5 pg/ml for 1 hour at 37°C. The plate was washed and incubated with 50 μ l per well of detect antibody HA721231 [PS00-66] (Biotin, 1:4000) for 1 hour at 37°C. Then the plate was washed and incubated with 50 μ l per well of Streptavidin-HRP for 0.5 hour at 37°C. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

Capture/detect antibodies, Recombinant IL-4 protein, Streptavidin-HRP are diluted in 1% BSA/PBST.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Carr C., Aykent S., Kimack N.M., Levine A.D. Disulfide assignments in recombinant mouse and human interleukin 4. *Biochemistry* 30:1515-1523 (1991)
2. LaPorte S.L., Juo Z.S., Vaclavikova J., Colf L.A., Qi X., Heller N.M., Keegan A.D., Garcia K.C. Molecular and structural basis of cytokine receptor pleiotropy in the interleukin-4/13 system. *Cell* 132:259-272 (2008)

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