

Anti-IL-10 Antibody
Catalog # ABO12699**Specification**

Anti-IL-10 Antibody - Product Information

Application	WB, IHC-P, E
Primary Accession	P22301
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Interleukin-10(IL10) detection. Tested with WB, IHC-P, ELISA in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-IL-10 Antibody - Additional Information

Gene ID 3586

Other Names

Interleukin-10, IL-10, Cytokine synthesis inhibitory factor, CSIF, IL10

Calculated MW

20517 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat

ELISA
, 0.1-0.5 µg/ml, Human, -
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Secreted.

Tissue Specificity

Produced by a variety of cell lines, including T-cells, macrophages, mast cells and other cell types.

Protein Name

Interleukin-10(IL-10)

Contents

Each vial contains 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃. Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify "Carrier Free" or "No BSA" in your order note. "

Immunogen

E. coli-derived human IL-10 recombinant protein(Position: S19-N178).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the IL-10 family.

Anti-IL-10 Antibody - Protein Information**Name** IL10**Function**

Major immune regulatory cytokine that acts on many cells of the immune system where it has profound anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Mechanistically, IL10 binds to its heterotetrameric receptor comprising IL10RA and IL10RB leading to JAK1 and STAT2-mediated phosphorylation of STAT3 (PubMed: [16982608](http://www.uniprot.org/citations/16982608)). In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators (PubMed: [18025162](http://www.uniprot.org/citations/18025162)). Targets antigen-presenting cells (APCs) such as macrophages and monocytes and inhibits their release of pro-inflammatory cytokines including granulocyte-macrophage colony-stimulating factor /GM-CSF, granulocyte colony-stimulating factor/G-CSF, IL-1 alpha, IL-1 beta, IL-6, IL-8 and TNF-alpha (PubMed: [11564774](http://www.uniprot.org/citations/11564774), PubMed: [1940799](http://www.uniprot.org/citations/1940799), PubMed: [7512027](http://www.uniprot.org/citations/7512027)). Also interferes with antigen presentation by reducing the expression of MHC-class II and co-stimulatory molecules, thereby inhibiting their ability to induce T cell activation (PubMed: [8144879](http://www.uniprot.org/citations/8144879)). In addition, controls the inflammatory response of macrophages by reprogramming essential metabolic pathways including mTOR signaling (By similarity).

Cellular Location

Secreted.

Tissue Location

Produced by a variety of cell lines, including T- cells, macrophages, mast cells and other cell types

Anti-IL-10 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](#)

Anti-IL-10 Antibody - Images

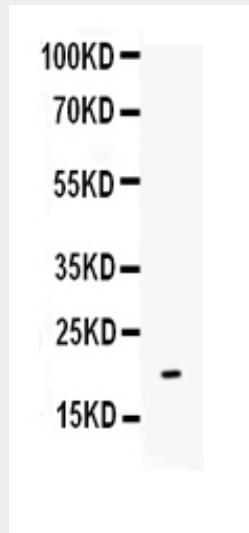


Figure. Western blot analysis of IL-10 using anti- IL-10 antibody (ABO12699). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane : Recombinant Human IL-10 Protein 0.5ng. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- IL-10 antigen affinity purified polyclonal antibody (Catalog # ABO12699) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for IL-10 at approximately 19KD. The expected band size for IL-10 is at 19KD.

Anti-IL-10 Antibody - Background

Interleukin-10(IL-10 or IL10), also known as human cytokine synthesis inhibitory factor(CSIF), is an anti-inflammatory cytokine. In humans IL-10 is encoded by the IL10 gene. It is capable of inhibiting synthesis of pro-inflammatory cytokines like IFN-gamma, IL-2, IL-3, TNFalpha and GM-CSF made by cells such as macrophages and regulatory T-cells. IL-10 also displays potent abilities to suppress the antigen presentation capacity of antigen presenting cells. Kim et al.(1992) showed that the mouse IL 10 gene contains 5 exons and spans about 5.2 kb of genomic DNA. Eskdale et al.(1997) mapped the IL10 gene to the junction between 1q31 and 1q32.