

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

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**Anti-IL-10 Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | <b>WB</b>              |
| Primary Accession | <a href="#">P22301</a> |
| Host              | <b>Rabbit</b>          |
| Reactivity        | <b>Human</b>           |
| Clonality         | <b>Polyclonal</b>      |
| Format            | <b>Lyophilized</b>     |

**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<br> <br>ELISA , 0.1-0.5 µg/ml, Human, -<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>. 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 r<sup>o</sup> Constitution, at 4°C for one month. It<sup>o</sup> 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)). Interferes also 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

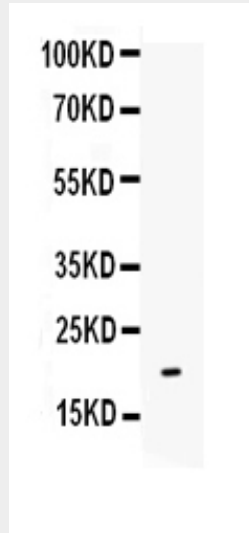


Figure. Western blot analysis of IL-10 using anti- IL-10 antibody (ABO12699). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane : Recombinant Human 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.