

### **IL-10 Antibody**

Rabbit Polyclonal Antibody Catalog # ABV11194

## **Specification**

## **IL-10 Antibody - Product Information**

Application WB
Primary Accession P22301

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 20517

## **IL-10 Antibody - Additional Information**

**Gene ID 3586** 

Positive Control Western Blot: Jurkat cell lysate

Application & Usage Western blot: 1:200

**Other Names** 

CSIF, IL-10, IL10A, TGIF, B-TCGF, GVHDS, MGC126450, MGC126451, RP11-262N9.1, Interleukin-10

Target/Specificity

IL-10

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

#### **Formulation**

 $100~\mu g$  or  $30~\mu g$  (0.5 mg/ml) of antibody in PBS containing 0.01 % BSA, 0.01 % thimerosal, and 50~ % glycerol, pH7.2

## Handling

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

## **Precautions**

IL-10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **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: <a href="http://www.uniprot.org/citations/16982608" target="\_blank">16982608</a>). In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators  $(PubMed: <a href="http://www.uniprot.org/citations/18025162" target="\_blank">18025162 </a>).$ 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-8 and TNF-alpha (PubMed: <a href="http://www.uniprot.org/citations/11564774" target=" blank">11564774</a>, PubMed:<a href="http://www.uniprot.org/citations/1940799" target="blank">1940799</a>, PubMed:<a href="http://www.uniprot.org/citations/7512027" target=" blank">7512027</a>). 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: <a href="http://www.uniprot.org/citations/8144879" target=" blank">8144879</a>). 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

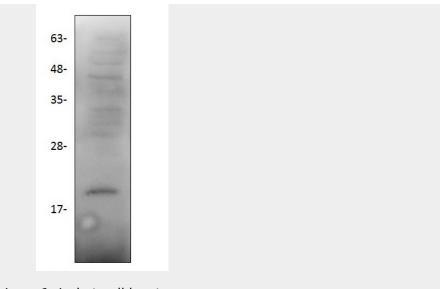
## **IL-10 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

# IL-10 Antibody - Images





Western blot with IL-10 antibody. Lane 1: Jurkat cell lysate.

## IL-10 Antibody - Background

IL-10 (Interleukin-10), originally known as Cytokine Synthesis Inhibitory Factor (CSIF), is an 20.5 kDa protein containing 161-178 amino acid residues. IL10 is produced primarily by monocytes and to a lesser extent by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. This cytokine can block NF-kappa B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract.