

**IL-10 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1011a****Specification**

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**IL-10 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P22301</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>

**Description**

Interleukine 10 (IL-10) is a cytokine 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.

**Immunogen**

Purified recombinant fragment of human IL-10 expressed in E. Coli.

**Formulation**

Purified antibody in PBS containing 0.03% sodium azide.

**IL-10 Antibody - Additional Information**

**Gene ID** 3586

**Other Names**

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

**Dilution**

WB~~1/500 - 1/2000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**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-6, 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>). 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:<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

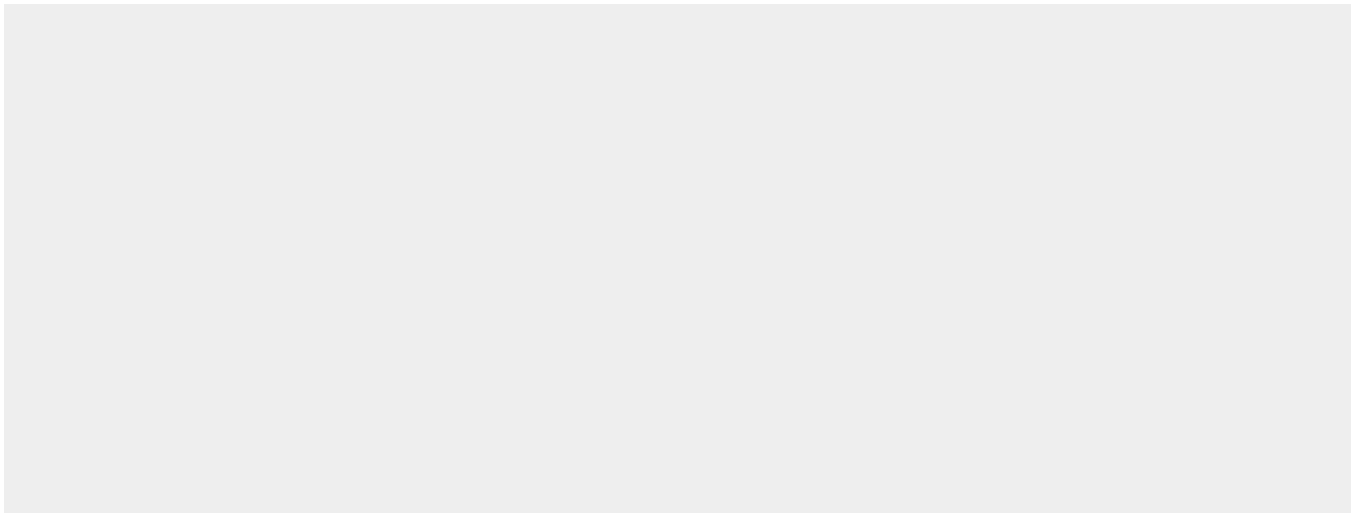
Produced by a variety of cell lines, including T- cells, macrophages, mast cells and other cell types

### 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 Cytometry](#)
- [Cell Culture](#)

### IL-10 Antibody - Images



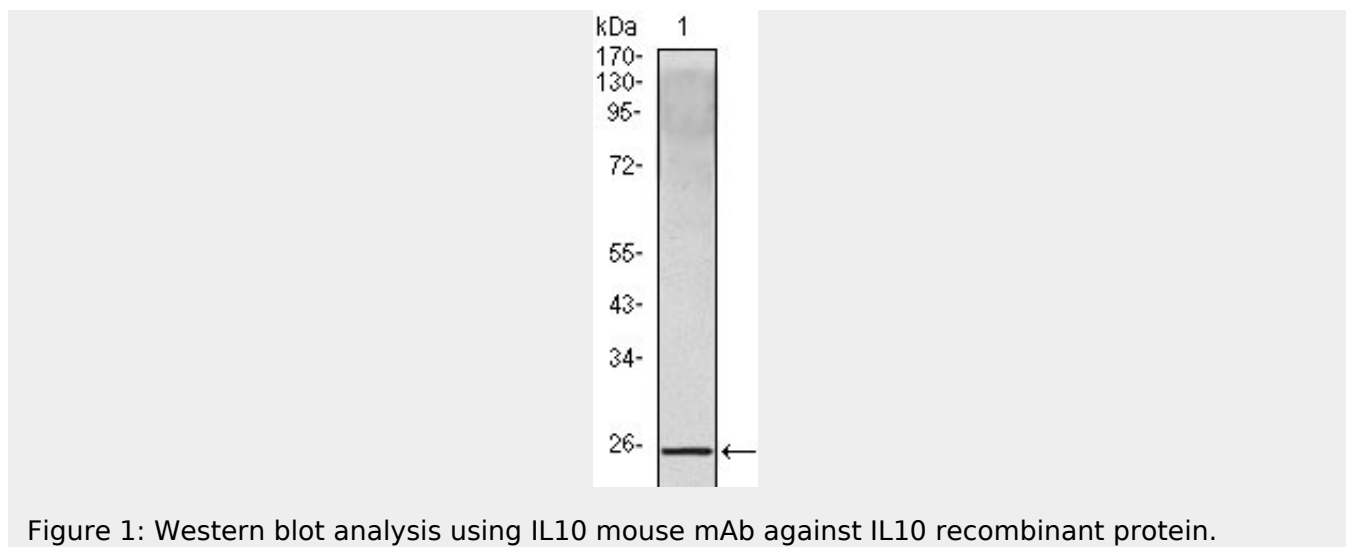


Figure 1: Western blot analysis using IL10 mouse mAb against IL10 recombinant protein.

#### **IL-10 Antibody - References**

1. Vieira P, et al. PNAS, 1991.88:1172-1176.