

**Anti-Human IL-10 (RABBIT) Antibody**  
**IL-10 Antibody**  
**Catalog # ASR3868**

**Specification**

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**Anti-Human IL-10 (RABBIT) Antibody - Product Information**

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	IL-10 antiserum has been tested for use in immunoblotting. Although not tested, this antibody may be useful in radioimmunoassay, neutralizations, immunoprecipitation, ELISA and immunohistochemistry. Reactivity in other immunoassays is unknown. In Western blot analysis of natural cell products or human body fluids, multiple bands of IL-10 will appear due to the variable amount of glycosylation on the molecule. The antiserum is also useful for neutralization of human of IL-10 activity in bioassays. For neutralization, incubate the sample with a 1:400 dilution of the antiserum for at least 4 hours before being tested. A control of similarly diluted normal rabbit IgG (heat inactivated) is recommended.
Physical State	Liquid (sterile filtered)
Immunogen	The whole rabbit serum was prepared by repeated immunizations with human IL-10.
Preservative	0.01% (w/v) Sodium Azide

**Anti-Human IL-10 (RABBIT) Antibody - Additional Information**

**Gene ID** 3586

**Other Names**  
3586

**Purity**

The antiserum detects recombinant and native IL-10 present in body fluids and cell supernatants in various assays (ie. IL-1 stimulated IL-10 production from fibroblasts). The antibody recognizes hu IL-10. The antibody will not neutralize the biological activity of murine IL-10.

**Storage Condition**

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after

standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-Human IL-10 (RABBIT) 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

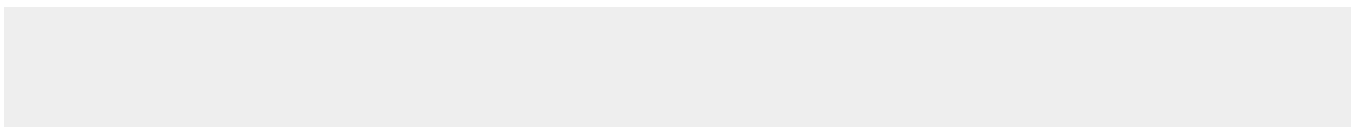
Produced by a variety of cell lines, including T- cells, macrophages, mast cells and other cell types

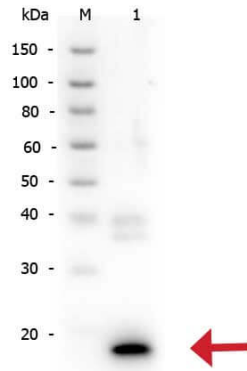
## Anti-Human IL-10 (RABBIT) Antibody - Protocols

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-Human IL-10 (RABBIT) Antibody - Images





Western Blot of Rabbit anti-IL-10 antibody. Lane 1: Recombinant Human IL-10. Load: 50 ng per lane. Primary antibody: IL-10 antibody at 1:500 for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: Blocking Buffer for Fluorescent Western Blotting (MB-070) for 30 min at RT. Predicted/Observed size: 17 kDa, 17 kDa for IL-10.

### **Anti-Human IL-10 (RABBIT) Antibody - Background**

Anti-IL-10 Antibody recognizes IL-10 (IL-10 or IL10), also known as human cytokine synthesis inhibitory factor (CSIF), that is an anti-inflammatory cytokine. In humans IL-10 is encoded by the IL10 gene. IL-10 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 antigens, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. IL-10 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 and indeed patients with Crohn's disease react favorably towards treatment with bacteria producing recombinant interleukin 10, showing the importance of interleukin 10 for counteracting excessive immunity in the human body. Anti-IL-10 cytokine antibody is ideal for investigators involved Immunology and Signal Transduction research.