10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IL-10 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1011a

Specification

IL-10 Antibody - Product Information

Application	**WB**
Primary Accession	P22301
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**

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:16982608). In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators (PubMed: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, PubMed:1940799, PubMed: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). 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 Cytomety
- Cell Culture

IL-10 Antibody - Images

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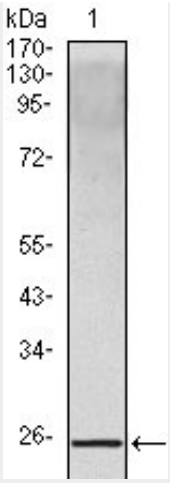

Figure 1: Western blot analysis using IL10 mouse mAb against IL10 recombinant protein.

IL-10 Antibody - References

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