

IL-10 Antibody

Rabbit Polyclonal Antibody Catalog # ABV11194

Specification

IL-10 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P22301</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 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 μg or 30 μg (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: 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: 1940799, PubMed:7512027, PubMed:11564774). 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.

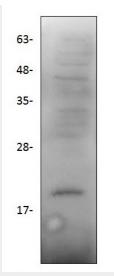
Tissue Location

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.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- 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.