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

IL-10 Antibody

Rabbit Anti Human Polyclonal Antibody
Catalog # ABV11693

Product Information

Application	WB
Primary Accession	P22301
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	20517

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	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.

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 (PubMed:11564774, PubMed:1940799, PubMed:7512027). 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: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

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.