

Anti-IL-10 Antibody

Catalog # ABO12699

Product Information

Application	WB, IHC-P, E
Primary Accession	P22301
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Interleukin-10(IL10) detection. Tested with WB, IHC-P, ELISA in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3586
Other Names	Interleukin-10, IL-10, Cytokine synthesis inhibitory factor, CSIF, IL10
Calculated MW	20517
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat ELISA , 0.1-0.5 μ g/ml, Human, - Western blot, 0.1-0.5 μ g/ml, Human
Subcellular Localization	Secreted.
Tissue Specificity	Produced by a variety of cell lines, including T-cells, macrophages, mast cells and other cell types.
Source	Eukaryota
Protein Name	Interleukin-10(IL-10)
Contents	Each vial contains 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ . Carrier free (No BSA) form available in stock. If you want this antibody carrier free please specify Carrier Free" or "No BSA" in your order note. "
Immunogen	E. coli-derived human IL-10 recombinant protein(Position: S19-N178).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the IL-10 family.

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

Interleukin-10(IL-10 or IL10), also known as human cytokine synthesis inhibitory factor(CSIF), is an anti-inflammatory cytokine. In humans IL-10 is encoded by the IL10 gene. It is capable of inhibiting synthesis of pro-inflammatory cytokines like IFN-gamma, IL-2, IL-3, TNFalpha and GM-CSF made by cells such as macrophages and regulatory T-cells.IL-10 also displays potent abilities to suppress the antigen presentation capacity of antigen presenting cells. Kim et al.(1992) showed that the mouse IL 10 gene contains 5 exons and spans about 5.2 kb of genomic DNA. Eskdale et al.(1997) mapped the IL10 gene to the junction between 1q31 and 1q32.

Images



Figure. Western blot analysis of IL-10 using anti- IL10 antibody (ABO12699). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane : Recombinant Human IL-10 Protein 0.5ngAfter Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- IL-10 antigen affinity purified polyclonal antibody (Catalog # ABO12699) at 0.5 µg/mL overnight at 4 °C,

then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for IL-10 at approximately 19KD. The expected band size for IL-10 is at 19KD.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.