

IL10 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9112C**Specification**

IL10 Antibody (Center) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	P22301
Other Accession	P79338 , P03180
Reactivity	Human
Predicted	Epstein Barr Virus, Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	27-53

IL10 Antibody (Center) - Additional Information**Gene ID** 3586**Other Names**

Interleukin-10, IL-10, Cytokine synthesis inhibitory factor, CSIF, IL10

Target/Specificity

This IL10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 27-53 amino acids from the Central region of human IL10.

DilutionWB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

IL10 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

IL10 Antibody (Center) - 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

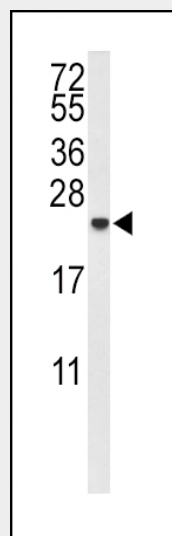
Produced by a variety of cell lines, including T- cells, macrophages, mast cells and other cell types

IL10 Antibody (Center) - Protocols

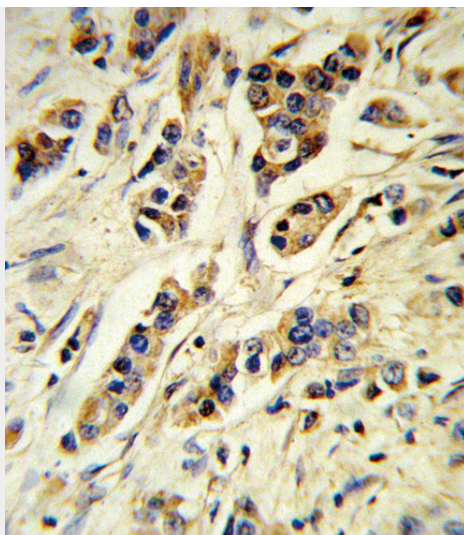
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

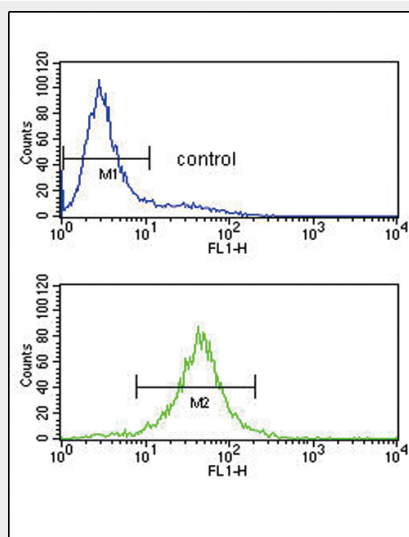
IL10 Antibody (Center) - Images



Western blot analysis of IL10 Antibody (Center) (Cat. #AP9112c) in MDA-MB435 cell line lysates (35ug/lane). IL10 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human breast carcinoma reacted with IL10 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



IL10 Antibody (Center) (Cat. #AP9112c) flow cytometry analysis of Jurkat cells (bottom histogram) compared to a negative control (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

IL10 Antibody (Center) - Background

The protein 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.

IL10 Antibody (Center) - References

Trajkov, D., et al., Indian J Tuberc 56 (3), 117-131 (2009)
Kim, J.M., et al., J. Immunol. 148 (11), 3618-3623 (1992)