

# **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 <u>P22301</u>

Other Accession P79338, P03180

Reactivity Human

Predicted EBV, Monkey

Host Rabbit
Clonality Polyclonal
Isotype Rabbit Ig
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.

# **Dilution**

WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

#### **Format**

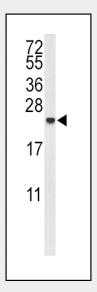
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

# **Storage**

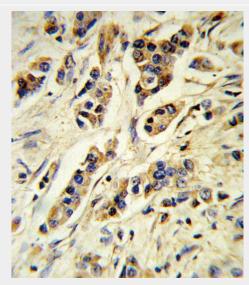
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

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



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



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:<a href="http://www.uniprot.org/c itations/16982608"}

target="\_blank">16982608</a>). In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators (PubMed:<a href="http://www.uniprot.org/citations/18025162" target=" blank">18025162</a>). Targets

target="\_blank">18025162</a>). 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:<a href="http://www.uniprot.org/c itations/1940799"

target="\_blank">1940799</a>,

PubMed:<a href="http://www.uniprot.org/ci tations/7512027"

target="\_blank">7512027</a>,

PubMed: <a href="http://www.uniprot.org/ci tations/11564774"

target=" blank">11564774</a>).

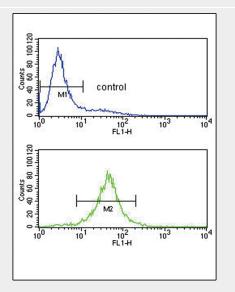
Interferes also with antigen presentation by reducing the expression of MHC-class II and co-stimulatory molecules, thereby inhibiting their ability to induce T cell activation (PubMed:<a href="http://www.uniprot.org/citations/8144879" target="\_blank">8144879</a>). In

target="\_blank">8144879</a>). In addition, controls the inflammatory response of macrophages by reprogramming essential metabolic pathways including mTOR signaling (By similarity).

**Cellular Location** Secreted.

**Tissue Location** 

## 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)





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
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture