

### **IL-10 Polyclonal Antibody**

**Catalog # AP73321** 

### **Specification**

### **IL-10 Polyclonal Antibody - Product Information**

Application WB, IHC-P
Primary Accession P22301
Reactivity Human
Host Rabbit
Clonality Polyclonal

# IL-10 Polyclonal Antibody - Additional Information

**Gene ID 3586** 

#### **Other Names**

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

#### Dilution

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IHC-P~ $\sim$ N/A

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

### **Storage Conditions**

-20°C

### **IL-10 Polyclonal 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:<a href="http://www.uniprot.org/citations/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 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/citations/1940799" target="\_blank">11564774</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/1940799" target="\_blank">1940799</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/7512027" target="\_blank">7512027</a>). 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:<a href="http://www.uniprot.org/citations/8144879" 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**

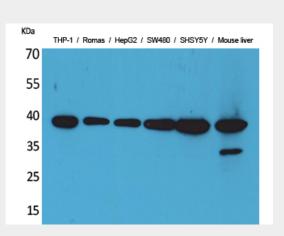
Produced by a variety of cell lines, including T- cells, macrophages, mast cells and other cell types

# **IL-10 Polyclonal Antibody - Protocols**

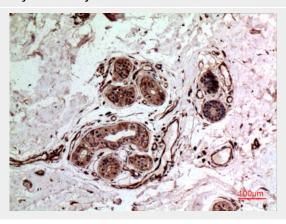
Provided below are standard protocols that you may find useful for product applications.

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

# IL-10 Polyclonal Antibody - Images

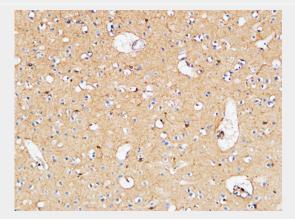


Western Blot analysis of THP-1, Romas, HepG2, SW480, SHSY5Y, Mouse liver cells using IL-10 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

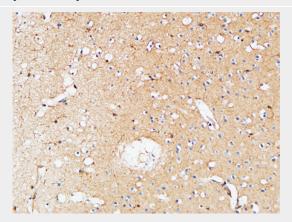




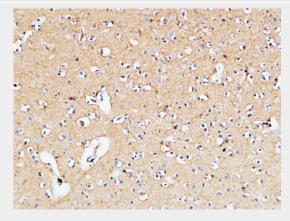
Immunohistochemical analysis of paraffin-embedded human-breast-cancer, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded Human Cerebral cortex. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

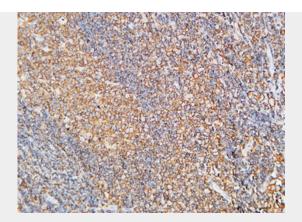


Immunohistochemical analysis of paraffin-embedded Human Cerebral cortex. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

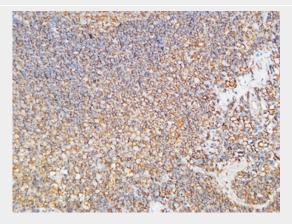


Immunohistochemical analysis of paraffin-embedded Human Cerebral cortex. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

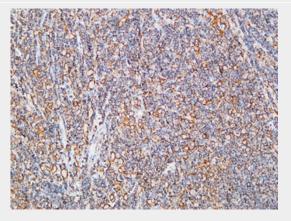




Immunohistochemical analysis of paraffin-embedded Human lymphoma. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

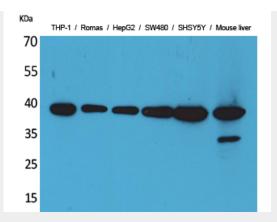


Immunohistochemical analysis of paraffin-embedded Human lymphoma. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

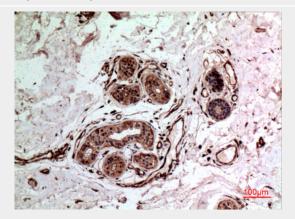


Immunohistochemical analysis of paraffin-embedded Human lymphoma. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

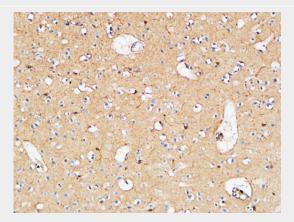




Western Blot analysis of THP-1, Romas, HepG2, SW480, SHSY5Y, Mouse liver cells using IL-10 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

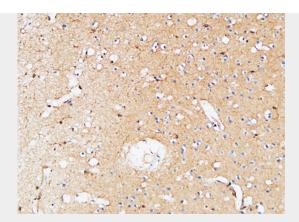


Immunohistochemical analysis of paraffin-embedded human-breast-cancer, antibody was diluted at 1:100

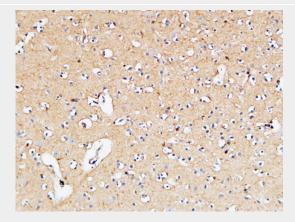


Immunohistochemical analysis of paraffin-embedded Human Cerebral cortex. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

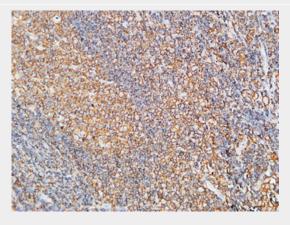




Immunohistochemical analysis of paraffin-embedded Human Cerebral cortex. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

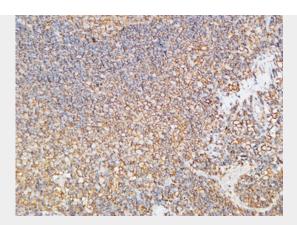


Immunohistochemical analysis of paraffin-embedded Human Cerebral cortex. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

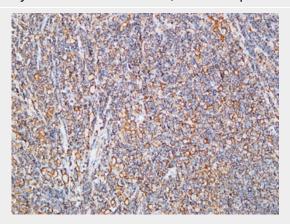


Immunohistochemical analysis of paraffin-embedded Human lymphoma. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).





Immunohistochemical analysis of paraffin-embedded Human lymphoma. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunohistochemical analysis of paraffin-embedded Human lymphoma. 1, Antibody was diluted at 1:200(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).

### IL-10 Polyclonal Antibody - Background

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).