

# Anti-CXCL10/IP-10 Antibody

**Catalog # ABO10719** 

#### **Specification**

# Anti-CXCL10/IP-10 Antibody - Product Information

Application WB, IHC-P
Primary Accession P02778
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for C-X-C motif chemokine 10(CXCL10) detection. Tested with WB, IHC-P in Human.

#### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-CXCL10/IP-10 Antibody - Additional Information

**Gene ID 3627** 

#### **Other Names**

C-X-C motif chemokine 10, 10 kDa interferon gamma-induced protein, Gamma-IP10, IP-10, Small-inducible cytokine B10, CXCL10(1-73), CXCL10, INP10, SCYB10

# **Calculated MW**

10881 MW KDa

#### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat<br/>br>Western blot, 0.1-0.5 μg/ml, Human<br/>br>

#### **Subcellular Localization**

Secreted.

#### **Protein Name**

C-X-C motif chemokine 10

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human IP10(79-98aa SKAIKNLLKAVSKERSKRSP).

# **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 intercrine alpha (chemokine CxC) family.

# **Anti-CXCL10/IP-10 Antibody - Protein Information**

Name CXCL10

Synonyms INP10, SCYB10

#### **Function**

Pro-inflammatory cytokine that is involved in a wide variety of processes such as chemotaxis, differentiation, and activation of peripheral immune cells, regulation of cell growth, apoptosis and modulation of angiostatic effects (PubMed: <a href="http://www.uniprot.org/citations/11157474" target=" blank">11157474</a>, PubMed:<a href="http://www.uniprot.org/citations/22652417" target="blank">22652417</a>, PubMed:<a href="http://www.uniprot.org/citations/7540647" target=" blank">7540647</a>). Plays thereby an important role during viral infections by stimulating the activation and migration of immune cells to the infected sites (By similarity). Mechanistically, binding of CXCL10 to the CXCR3 receptor activates G protein-mediated signaling and results in downstream activation of phospholipase C-dependent pathway, an increase in intracellular calcium production and actin reorganization (PubMed:<a href="http://www.uniprot.org/citations/12750173" target=" blank">12750173</a>, PubMed:<a href="http://www.uniprot.org/citations/19151743" target="blank">19151743</a>). In turn, recruitment of activated Th1 lymphocytes occurs at sites of inflammation (PubMed:<a href="http://www.uniprot.org/citations/12663757" target=" blank">12663757</a>, PubMed:<a href="http://www.uniprot.org/citations/12750173" target="blank">12750173</a>). Activation of the CXCL10/CXCR3 axis also plays an important role in neurons in response to brain injury for activating microglia, the resident macrophage population of the central nervous system, and directing them to the lesion site. This recruitment is an essential element for neuronal reorganization (By similarity).

# Cellular Location Secreted.

#### **Tissue Location**

Mainly secreted by monocytes, endothelial cells as well as fibroblasts. Expressed by epithelial cells in thymus (PubMed:11157474). Microglial cells produce CXCL10 in response to viral stimulation (PubMed:12663757).

# Anti-CXCL10/IP-10 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot

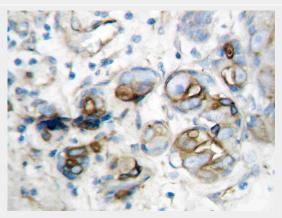


- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-CXCL10/IP-10 Antibody - Images



Anti-IP10 antibody, ABO10719, Western blottingLane 1: Recombinant Human CXCL10 Protein 10ngLane 2: Recombinant Human CXCL10 Protein 5ngLane 3: Recombinant Human CXCL10 Protein 2.5ng



Anti-IP10 antibody, ABO10719, IHC(P)IHC(P): Human Mammary Cancer Tissue

## Anti-CXCL10/IP-10 Antibody - Background

C-X-C motif chemokine 10(CXCL10), also known as Interferon gamma-induced protein 10 kDa(IP-10) or small-inducible cytokine B10, is a protein that in humans is encoded by the CXCL10 gene. It is a small cytokine belonging to the CXC chemokine family. The gene for CXCL10 is located on human chromosome 4 in a cluster among several other CXC chemokines. Luster et al.(1987) reported the isolation of an interferon-inducible gene that encodes a 98-amino acid protein called IP10. The chemokine IFN-gamma-inducible protein 10(IP-10; CXCL10), a CXC chemokine, and its receptor, CXCR3, were found to be overexpressed in lymph node cells of EAMG rats. IP10 inhibits bone marrow colony formation, has antitumor activity in vivo, is a chemoattractant for human monocytes and T cells, and promotes T cell adhesion to endothelial cells.