

## CXCL10/IP10 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57998

# **Specification**

## CXCL10/IP10 Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession
Host
Clonality
Calculated MW
Physical State
P02778
Rabbit
Polyclonal
10 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

from human CXCL10/IP10

Epitope Specificity 29-70/98

Isotype IgG
Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Secreted

SIMILARITY Belongs to the intercrine alpha (chemokine

CxC) family.

Post-translational modifications CXCL10(1-73) is produced by proteolytic

cleavage after secretion from

keratinocytes.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

# **Background Descriptions**

affinity purified by Protein A

bs-1502P is one synthetic peptide derived from mouse CXCL10. Interferon-gamma-inducible 10 kD protein (IP-10), is a CXC chemokine with chemoattractant properties for CD4-positive T cells and inhibits early normal and leukemic hemopoietic progenitor proliferation. IP-10 is produced by a wide variety of cell types ranging from neutrophils and monocytes to hepatocytes, endothelial cells and keratinocytes. The cytokine is reported to be involved in a scala of inflammatory pathologies such as HIV encephalitis, cutaneous T cell lymphoma, chronic hepatitis and acute anterior uveitis. Various observations strongly suggest a role for the CXC chemokines IL-8 and IP-10 in the regulation of angiogenic activity in cancer and in idiopathic pulmonary fibrosis.

## CXCL10/IP10 Polyclonal 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

#### **Dilution**



<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution\_IF">IF~~1:50~200</span><br \> <span class ="dilution\_ICC">ICC~~N/A</span><br \> <span class = "dilution\_E">E~~N/A</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

## Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# CXCL10/IP10 Polyclonal 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).

# CXCL10/IP10 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides

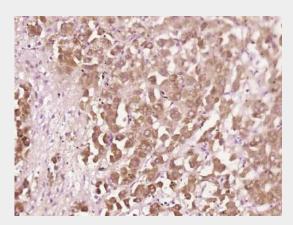




• Dot Blot

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

# CXCL10/IP10 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Human liver cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CXCL10) Polyclonal Antibody, Unconjugated (bs-23238R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.