

CXCL10/IP10 Rabbit pAb

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Catalog # AP94159

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P17515
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	10789
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse CXCL10
Epitope Specificity	35-98/98
Isotype	IgG
Purity	affinity purified by Protein A
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	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.

Additional Information

Gene ID	15945
Other Names	C-X-C motif chemokine 10, 10 kDa interferon gamma-induced protein, Gamma-IP10, IP-10, C7, Interferon-gamma induced protein CRG-2, Small-inducible cytokine B10, Cxcl10, Crg2, Ifi10, Inp10, Scyb10
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1ug/Test
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.

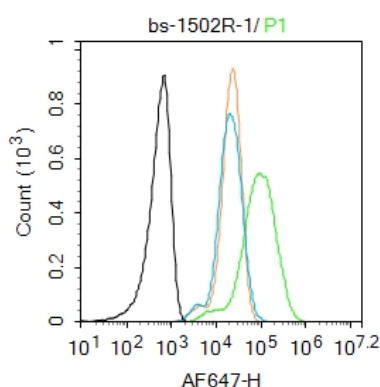
Protein Information

Name	Cxcl10
Synonyms	Crg2, Ifi10, 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 (By similarity) (PubMed: 28623423). Plays thereby an important role during viral infections by stimulating the activation and migration of immune cells to the infected sites (PubMed: 18624292 , PubMed: 19017990 , PubMed: 28468883). 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. In turn, recruitment of activated Th1 lymphocytes occurs at sites of inflammation (By similarity). 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 (PubMed: 15456824).
Cellular Location	Secreted {ECO:0000250 UniProtKB:P02778}.
Tissue Location	Expressed in the spleen, thymus, lymph nodes and liver (PubMed:8145049). Expressed in astrocytes, microglia, and neurons (PubMed:15456824).

Background

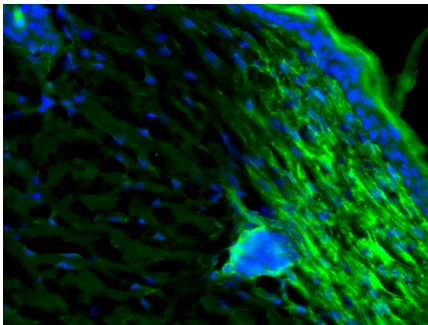
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Images

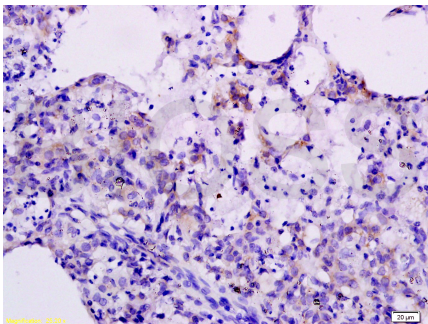


Blank control: Raw264.7.
Primary Antibody (green line): Rabbit Anti-CXCL10/IP10 antibody (AP94159)
Dilution: 1 µg /10⁶ cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody : Goat anti-rabbit IgG-AF647
Dilution: 1 µg /test.
Protocol
The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature.The cells were then

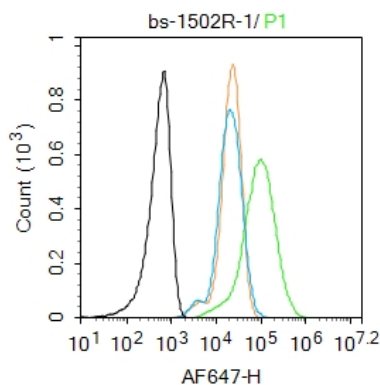
incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



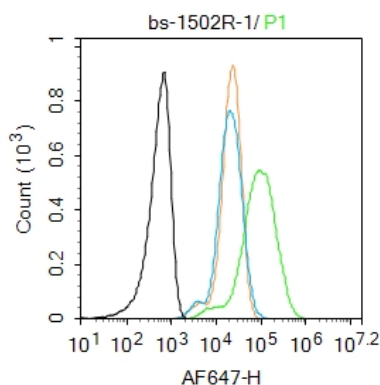
C57BL/6 mice skin were fixed in pre-chilled MeOH and incubated at -20°C for 10 minutes. They were washed in PBS at RT 3 times for 5 minutes each. The sections were blocked for 60 minutes at RT with PBS containing 5% BSA. The block was removed, anti-CXCL10 antibody (AP94159) diluted 1:50 was added, then incubated overnight at 4°C. Then washed with PBS (0.005% Tween20) for 15 minutes each followed by 2 washes of PBS for 5 minutes each. The secondary antibody, anti-rabbit A488 was diluted 1:500, added to the sections and incubated for 1 hour at RT. Then washed for 10 minutes in PBS 4 times



Tissue/cell: rat lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-CXCL10 Polyclonal Antibody, Unconjugated(AP94159) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.