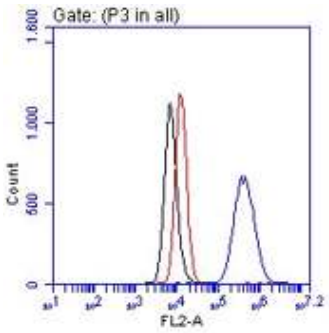
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	IP-10, Human, clone 6D4, FITC conjugated		
Catalog number	HM2030F-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Mouse IgG2a	**Conjugate**	FITC
Endotoxin	N.A.	**Purification**	Protein G
Storage	4°C		

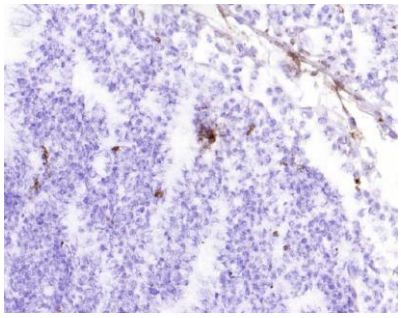
Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #	4		4	3		1,2,5		4
Yes	●		●	●		●		●
No		●						
N.D.					●		●	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: Flow cytometric detection of LPS stimulated HUVEC cells with monoclonal antibody to IP-10. Black line is only the cells. Red line is isotype control and the blue line is 2 µg / 250000 cells mAb 6D4.



IHC-F: Frozen sections of tonsil tissue. Positive cells were detected in the lumen of the vein and lymphatic tissue. Dilution of HM2030 was 1:25.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- FC: Antibody 6D4 stains human CXCL10. For intracellular staining activated plasmacytoid dendritic cells were fixed with 2% paraformaldehyde and permeabilized with 0.5% saponin. All steps were performed in presence of 0.5 M EDTA to avoid cell aggregation (Ref.3)
- W: Tissue was homogenized in loading sample buffer and subjected to SDS-PAGE. The band size is ~9 kDa (Ref.4).
- IHC-F: Tissue sections were fixed 10 minutes in acetone and pretreated with avidin/biotin blocking kit. As positive control chronically inflamed liver was used and as negative control normal liver and isotype matched antibody (Ref.4).
- Positive control: Acitvated plasmacytoid dendritic cells; Negative control: Normal liver.

General Information

Description

The monoclonal antibody 6D4 recognizes human C-X-C motif chemokine 10 (IP-10), a protein of 98 amino acids. IP-10, also known as CXCL10, functions as ligand for the CXCR3 receptor. IP-10 belongs to the α-chemokine (C-X-C) family, which can be divided in two subfamilies: (1) potent chemoattractants for neutrophils, like IL-8 and (2) potent chemoattractants for lymphocytes, like the IFNγ inducible protein (IP)-10. IP-10 is produced by a wide variety of cell types ranging from neutrophils, dendritic cells 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, psoriasis and acute anterior uveitis. Various observations strongly suggest a role for the C-X-C chemokines IL-8 and IP-10 in the regulation of angiogenic activity in cancer and in idiopathic pulmonary fibrosis.

Furthermore IP-10 is associated with acute rejection processes estimated by the predictive properties of urinary IP-10 expression for the short- and long-term graft function after kidney transplantation.

Immunogen Recombinant human IP-10

Aliases C-X-C motif cytokine 10, 10 kDa interferon gamma-induced protein, CXCL10, Small-inducible cytokine B10

Gene Gene name: CXCL10

References

1. Hamamdzic, D. et al; Reovirus triggers cell type-specific proinflammatory responses dependent on the autocrine action of IFNβ. Am J Physiol Lung Cell Mol Physiol 2001, *280*: L18
2. Giustizieri, M et al; Nitric oxide donors suppress chemokine production by keratinocytes in vitro and in vivo. Am J Path 2002, *161*: 1409
3. Bendriss-Vermare, N et al; Virus overrides the propensity of human CD40L-activated plasmacytoid dendritic cells to produce Th2 mediators through synergistic induction of IFN-gamma and Th1 chemokine production. J of Leukoc Biol. 2005, *78*: 954
4. Curbishley, S et al; CXCR3 activation promotes lymphocyte transendothelial migration across human hepatic endothelium under fluid flow. Am J Pathol 2005, *167*: 887
5. Wetzel, M et al; μ-Opioid Induction of Monocyte Chemoattractant Protein-1, RANTES, and IFN-g-Inducible Protein-10 Expression in Human Peripheral Blood Mononuclear Cells. J Immunol 2000, *165*: 6519

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC	Date
Brenda Teunissen	16/11/2020

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.