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Anti-PF4 Antibody

Catalog # ABO10767

Product Information

Application	WB, IHC-P
Primary Accession	P02776
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Platelet factor 4(PF4) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5196
Other Names	Platelet factor 4, PF-4, C-X-C motif chemokine 4, Iroplact, Oncostatin-A, Platelet factor 4, short form, PF4, CXCL4, SCYB4
Calculated MW	10845
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Secreted.
Source	Eukaryota
Protein Name	Platelet factor 4(PF-4)
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 PF4(85-101aa DLQAPLYKKIIKKLLES).
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.

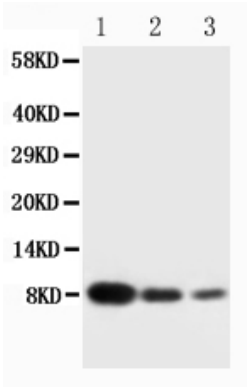
Protein Information

Name	PF4
Synonyms	CXCL4, SCYB4
Function	Chemokine released during platelet aggregation that plays a role in different biological processes including hematopoiesis, cell proliferation, differentiation, and activation (PubMed:29930254, PubMed:9531587). Acts via different functional receptors including CCR1, CXCR3A or CXCR3B (PubMed:18174362, PubMed:29930254). Upon interaction with CXCR3A receptor, induces activated T-lymphocytes migration mediated via downstream Ras/extracellular signal-regulated kinase (ERK) signaling (PubMed:18174362, PubMed:24469069). Neutralizes the anticoagulant effect of heparin by binding more strongly to heparin than to the chondroitin-4-sulfate chains of the carrier molecule. Plays a role in the inhibition of hematopoiesis and in the maintenance of hematopoietic stem cell (HSC) quiescence (PubMed:9531587). Chemotactic for neutrophils and monocytes via CCR1 (PubMed:29930254). Inhibits endothelial cell proliferation. In cooperation with toll-like receptor 8/TLR8, induces chromatin remodeling and activates inflammatory gene expression via the TBK1-IRF5 axis (PubMed:35701499). In addition, induces myofibroblast differentiation and collagen synthesis in different precursor cells, including endothelial cells, by stimulating endothelial-to-mesenchymal transition (PubMed:34986347). Interacts with thrombomodulin/THBD to enhance the activation of protein C and thus potentiates its anticoagulant activity (PubMed:9395524).
Cellular Location	Secreted.

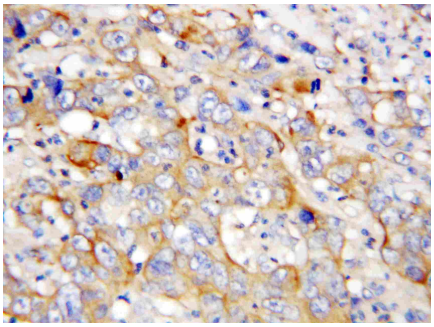
Background

CXCL4, Chemokine(C-X-C motif) ligand 4, is a 70-amino acid protein that is released from the alpha-granules of activated platelets and binds with high affinity to heparin. CXCL4 belongs to the CXC chemokine family. The CXCL4 gene contains 3 exons spanning approximately 1 kb. The gene is encoded on a 10-kb EcoRI fragment of genomic DNA. By in situ hybridization, the CXCL4 gene is mapped to chromosome 4q12-q21. Its major physiologic role appears to be neutralization of heparin-like molecules on the endothelial surface of blood vessels, thereby inhibiting local antithrombin III activity and promoting coagulation. As a strong chemoattractant for neutrophils and fibroblasts, PF4 probably has a role in inflammation and wound repair.

Images



Anti-PF4 antibody, ABO10767, Western blottingLane 1: Recombinant Human CXCL4 Protein 10ngLane 2: Recombinant Human CXCL4 Protein 5ngLane 3: Recombinant Human CXCL4 Protein 2.5ng



Anti-PF4 antibody, ABO10767, IHC(P)IHC(P): Human Lung Cancer Tissue

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