

Anti-PF4 Antibody
Catalog # ABO10767**Specification**

Anti-PF4 Antibody - 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.

Anti-PF4 Antibody - 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 MW KDa

Application Details

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

Subcellular Localization

Secreted.

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 DLQAPLYKKIICKLLES).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, 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-PF4 Antibody - 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](http://www.uniprot.org/citations/29930254), PubMed: [9531587](http://www.uniprot.org/citations/9531587)). Acts via different functional receptors including CCR1, CXCR3A or CXCR3B (PubMed: [18174362](http://www.uniprot.org/citations/18174362), PubMed: [29930254](http://www.uniprot.org/citations/29930254)). Upon interaction with CXCR3A receptor, induces activated T-lymphocytes migration mediated via downstream Ras/extracellular signal-regulated kinase (ERK) signaling (PubMed: [18174362](http://www.uniprot.org/citations/18174362), PubMed: [24469069](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/9531587)). Chemotactic for neutrophils and monocytes via CCR1 (PubMed: [29930254](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/35701499)). In addition, induces myofibroblast differentiation and collagen synthesis in different precursor cells, including endothelial cells, by stimulating endothelial-to-mesenchymal transition (PubMed: [34986347](http://www.uniprot.org/citations/34986347)). Interacts with thrombomodulin/THBD to enhance the activation of protein C and thus potentiates its anticoagulant activity (PubMed: [9395524](http://www.uniprot.org/citations/9395524)).

Cellular Location

Secreted.

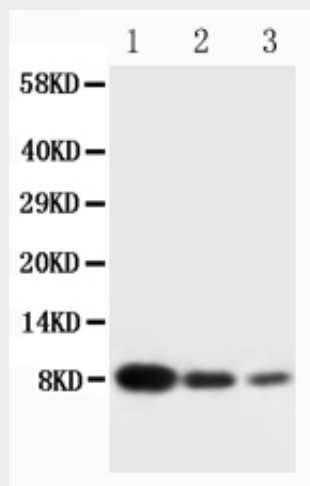
Anti-PF4 Antibody - Protocols

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

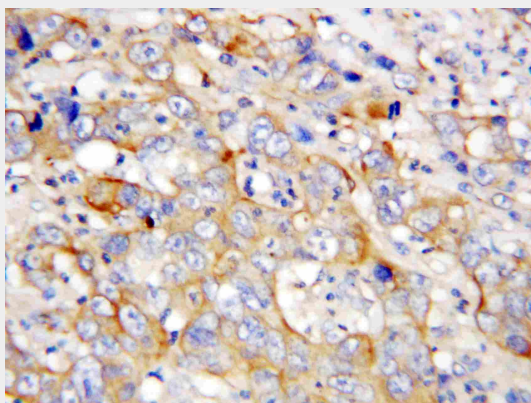
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-PF4 Antibody - Images



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



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

Anti-PF4 Antibody - 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.