

**Anti-PF4 Picoband Antibody** 

Catalog # ABO11629

#### Specification

## **Anti-PF4 Picoband Antibody - Product Information**

ApplicationWBPrimary AccessionP02776HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Platelet factor 4(PF4) detection. Tested with WB, ELISA in Human.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Anti-PF4 Picoband 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 ELISA , 0.1-0.5 μg/ml, Human, -<br>Western blot, 0.1-0.5 μg/ml, Human<br>

Subcellular Localization Secreted.

Protein Name Platelet factor 4

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Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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Immunogen

**Purification** Immunogen affinity purified.

**Cross Reactivity** 

E. coli-derived human PF4 recombinant protein (Position: E32-S101). Human PF4 shares 75.4% amino acid (aa) sequence identity with both mouse and rat PF4.



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.

## **Anti-PF4 Picoband 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:<a href="http://www.uniprot.org/citations/29930254" target=" blank">29930254</a>, PubMed:<a href="http://www.uniprot.org/citations/9531587" target=" blank">9531587</a>). Acts via different functional receptors including CCR1, CXCR3A or CXCR3B (PubMed:<a href="http://www.uniprot.org/citations/18174362" target="\_blank">18174362</a>, PubMed:<a href="http://www.uniprot.org/citations/29930254" target="\_blank">29930254</a>). Upon interaction with CXCR3A receptor, induces activated T-lymphocytes migration mediated via downstream Ras/extracellular signal-regulated kinase (ERK) signaling (PubMed:<a href="http://www.uniprot.org/citations/18174362" target=" blank">18174362</a>, PubMed:<a href="http://www.uniprot.org/citations/24469069" target=" blank">24469069</a>). 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) guiescence (PubMed:<a href="http://www.uniprot.org/citations/9531587" target=" blank">9531587</a>). Chemotactic for neutrophils and monocytes via CCR1 (PubMed: <a href="http://www.uniprot.org/citations/29930254" target=" blank">29930254</a>). 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:<a href="http://www.uniprot.org/citations/35701499" target="\_blank">35701499</a>). In addition, induces myofibroblast differentiation and collagen synthesis in different precursor cells, including endothelial cells, by stimulating endothelial-to-mesenchymal transition (PubMed:<a href="http://www.uniprot.org/citations/34986347" target="\_blank">34986347</a>). Interacts with thrombomodulin/THBD to enhance the activation of protein C and thus potentiates its anticoagulant activity (PubMed:<a href="http://www.uniprot.org/citations/9395524" target=" blank">9395524</a>).

Cellular Location Secreted.

#### **Anti-PF4 Picoband Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence



• Immunoprecipitation

- Flow Cytomety
- <u>Cell Culture</u>

Anti-PF4 Picoband Antibody - Images

130KD -	1	2
100KD — 70KD —		
55KD -		
35KD-		
25KD-	-	-
15KD -		

Western blot analysis of PF4 expression in 293T whole cell lysates (lane 1) and A549 whole cell lysates (lane 2). PF4 at 26KD was detected using rabbit anti- PF4 Antigen Affinity purified polyclonal antibody (Catalog # ABO11629) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

# Anti-PF4 Picoband Antibody - Background

Platelet factor 4 (PF4) is a small cytokine belonging to the CXC chemokine family that is also known as chemokine (C-X-C motif) ligand 4 (CXCL4). 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.