

PF4 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21972a

Specification

PF4 Antibody (N-Term) - Product Information

Application	WB,E
Primary Accession	<u>P02776</u>
Other Accession	<u>P10720</u>
Reactivity	Human
Predicted	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	10845

PF4 Antibody (N-Term) - 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

Target/Specificity

This PF4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 28-59 amino acids from human PF4.

Dilution

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PF4 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

PF4 Antibody (N-Term) - 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:<u>18174362</u>, PubMed:<u>24469069</u>). 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.

PF4 Antibody (N-Term) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PF4 Antibody (N-Term) - Images





Anti-PF4 Antibody (N-Term) at 1:2000 dilution + human spleen lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 11 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

PF4 Antibody (N-Term) - Background

Released during platelet aggregation. Neutralizes the anticoagulant effect of heparin because it binds more strongly to heparin than to the chondroitin-4-sulfate chains of the carrier molecule. Chemotactic for neutrophils and monocytes. Inhibits endothelial cell proliferation, the short form is a more potent inhibitor than the longer form.

PF4 Antibody (N-Term) - References

Poncz M., et al. Blood 69:219-223(1987). Eisman R., et al. Blood 76:336-344(1990). Zhang C., et al. Blood 98:610-617(2001). Ebert L., et al. Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases. Hillier L.W., et al. Nature 434:724-731(2005).