

PF-4 Polyclonal Antibody

Catalog # AP74189

Product Information

Application	IHC-P
Primary Accession	<u>P02776</u>
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	10845

Additional Information

Gene ID	5196
Other Names	Platelet factor 4 (PF-4) (C-X-C motif chemokine 4) (Iroplact) (Oncostatin-A) [Cleaved into: Platelet factor 4, short form]
Dilution	IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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: <u>29930254</u> , PubMed: <u>9531587</u>). Acts via different functional receptors including CCR1, CXCR3A or CXCR3B (PubMed: <u>18174362</u> , PubMed: <u>29930254</u>). 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: <u>9531587</u>). Chemotactic for neutrophils and monocytes via CCR1 (PubMed: <u>29930254</u>). 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: <u>35701499</u>). In addition, induces myofibroblast differentiation

and collagen synthesis in different precursor cells, including endothelial cells, by stimulating endothelial-to-mesenchymal transition (PubMed:<u>34986347</u>). Interacts with thrombomodulin/THBD to enhance the activation of protein C and thus potentiates its anticoagulant activity (PubMed:<u>9395524</u>).

Cellular Location

Secreted.

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.

Images



Immunohistochemical analysis of paraffin-embedded human-spleen, antibody was diluted at 1:200

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