

PF4 Antibody

Rabbit mAb Catalog # AP91427

Product Information

| Application Primary Accession Reactivity Clonality Other Names | WB, IHC, IP <u>P02776</u> Rat, Human Monoclonal C-X-C motif chemokine 4; CXCL4; Iroplact; OncostatinA; PF4; Platelet factor 4; SCYB4; short form; Small inducible cytokine subfamily member 4; |
|--|---|
| lsotype | Rabbit IgG |
| Host | Rabbit |
| Calculated MW | 10845 |

Additional Information

| Dilution | WB 1:500~1:2000 IHC 1:50~1:200 IP 1:50 |
|------------------------------|---|
| | |
| Purification | Affinity-chromatography |
| Immunogen | A synthesized peptide derived from human PF4 |
| Description | 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. |
| Storage Condition and Buffer | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium |
| - | azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle. |

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.

Images



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