

Anti-CXCL4 / PF4 Antibody (clone RTO)

Mouse Anti Human Monoclonal Antibody

Catalog # ALS18229

Product Information

Application	WB, IHC-P, E
Primary Accession	P02776
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Clone Names	RTO
Calculated MW	10845
Concentration (mg/ml)	1 mg/ml

Additional Information

Gene ID	5196
Alias Symbol	PF4
Other Names	PF4, C-X-C motif chemokine 4, CXCL4, Iroplact, Oncostatin-A, PF-4, SCYB4, Platelet factor 4
Target/Specificity	This antibody is specific for Human Platelet Factor IV. Clone RTO is seen to bind free PF4 in the absence of any bound heparin.
Reconstitution & Storage	Protein G purified
Precautions	Anti-CXCL4 / PF4 Antibody (clone RTO) is for research use only and not for use in diagnostic or therapeutic procedures.

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: 18174362 , PubMed: 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](#)). 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.