

Product datasheet for **AM31851PU-N**

PF4 Mouse Monoclonal Antibody [Clone ID: KKO]

Product data:

Product Type:	Primary Antibodies
Clone Name:	KKO
Applications:	ELISA, WB
Recommended Dilution:	ELISA: Use at 0.08 µg/ml following coating plate with PF4/ heparin complex. This can be done by incubating PF4 with an excess of heparin (100-200 U/ml), while coating the plate. Western blot.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Human Factor IV purified from the supernatant of Thrombin activated platelets.
Specificity:	This antibody is specific for Human Platelet Factor IV/heparin complexes. AM31851PU-N (clone KKO), unlike AM31850PU-N (clone RTO) which binds PF4 alone, is specific for PF4/heparin complexes and is seen to have similar binding properties as auto-antibodies found in HIT/HITT.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.02% Sodium Azide
Concentration:	lot specific
Purification:	Protein G Chromatography of Ascitic fluid
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	platelet factor 4
Database Link:	Entrez Gene 5196 Human P02776



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Background:

Platelet Factor IV (PF4) is a 70 aa protein released from the alpha granules of activated platelets. PF4 is synthesized by bone marrow megakaryocytes and stored in alpha granules as a non-covalent bound tetramer. Platelet factor IV binds with high affinity to heparin and plays a role in inflammation and wound repair. PF4 is a chemoattractant for neutrophils, monocytes and fibroblasts and has been reported to be an immunologic regulator that inhibits suppressor T-cell activity.

Heparin-Induced Thrombocytopenia/Thrombosis (HIT/HITT) is a life-threatening complication that manifests itself in a small population of patients exposed to intravenous-heparin. It is characterized by the production of PF4/heparin auto-antibodies.

These auto-antibodies bind the PF4/heparin complexes and subsequently bind the FcγIIa receptor on the platelets surface through their Fc region. This activates the platelets and can initiate clot formation.

Synonyms:

PF-4, Iropact, Oncostatin-A, CXCL4, SCYB4

Protein Families:

Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways:

Chemokine signaling pathway, Cytokine-cytokine receptor interaction