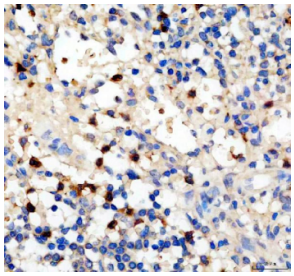
Platelet Factor 4 Antibody / Platelet Alpha Granule Protein Antibody (R32448)

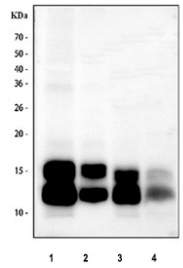
Catalog No.	Formulation	Size
R32448	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P02776
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml ELISA: 0.1-0.5ug/ml (human protein tested); request BSA-free format for coating
Limitations	This Platelet Factor 4 Antibody / Platelet Alpha Granule Protein Antibody is available for research use only.



Platelet Factor 4 Antibody Human Spleen IHC. Immunohistochemistry staining of FFPE human spleen tissue with Platelet Factor 4 Antibody. HIER was performed using pH 8 EDTA buffer for 20 minutes prior to staining. The tissue section was incubated with Platelet Factor 4 antibody, followed by HRP-conjugated secondary antibody and DAB chromogen detection. Platelet Factor 4 Antibody / Platelet Alpha Granule Protein Antibody demonstrates staining consistent with PF4 expression in platelet-associated cells and megakaryocyte lineage populations, supporting studies of platelet alpha granules, platelet activation and hematology-related immune signaling pathways.



Platelet Factor 4 Antibody Rat and Mouse Tissue WB. Western blot testing of rat spleen, rat lung, mouse spleen and mouse lung tissue lysates with Platelet Factor 4 Antibody at 0.5 ug/ml. Lane 1: rat spleen; Lane 2: rat lung; Lane 3: mouse spleen; Lane 4: mouse lung. PF4 was detected within the expected molecular weight range, with bands corresponding to monomeric and oligomeric forms of Platelet Factor 4. PF4 has a predicted monomeric size of approximately 8 kDa and can form higher molecular weight dimers and tetramers. Platelet Factor 4 Antibody / Platelet Alpha Granule Protein Antibody supports studies of platelet alpha granules, platelet activation and chemokine signaling pathways.

Description

Platelet Factor 4 Antibody / Platelet Alpha Granule Protein Antibody detects PF4, also known as CXCL4, a platelet-derived chemokine stored within platelet alpha granules. PF4 is synthesized primarily by megakaryocytes and packaged into developing platelets, where it becomes one of the most abundant alpha granule proteins released following platelet activation. This small CXC chemokine participates in platelet signaling, immune communication and vascular responses by regulating interactions between platelets and surrounding cells.

Platelet alpha granules contain numerous proteins involved in coagulation, inflammation and tissue responses. Upon platelet activation, Platelet Factor 4 is secreted into the extracellular environment, where it binds heparin-like molecules and other glycosaminoglycans. Through these interactions, PF4 contributes to pathways associated with platelet function, immune cell regulation and vascular biology. Platelet Factor 4 Antibody is commonly used by researchers studying platelet biology, megakaryocyte differentiation, alpha granule markers and hematology-related signaling pathways.

Research involving PF4 has demonstrated important connections between platelet activation and immune regulation. Beyond its traditional role as a platelet marker, CXCL4 has been investigated for effects on inflammatory signaling, macrophage activity, leukocyte responses and vascular remodeling. Because platelets actively participate in communication with immune cells, analysis of platelet alpha granule proteins provides insight into the relationship between coagulation pathways and immune system function.

The enrichment of PF4 within megakaryocytes and platelet alpha granules makes it a valuable marker for studying platelet lineage development and platelet activation states. Detection of PF4 expression supports research into hematopoiesis, platelet production and mechanisms controlling the release of platelet-derived signaling molecules. Platelet Factor 4 Antibody enables investigation of this specialized platelet chemokine across normal biological processes and disease-related research models.

Platelet Factor 4 Antibody applications include detection of PF4 expression, localization and regulation in biological samples using techniques such as Western blot, immunohistochemistry, immunofluorescence and related protein analysis methods. NSJ Bioreagents provides Platelet Factor 4 Antibody / Platelet Alpha Granule Protein Antibody for researchers studying platelet alpha granules, platelet activation, chemokine signaling and immune regulation.

Platelet Factor 4 Antibody detects a platelet alpha granule protein involved in platelet activation, chemokine release and immune signaling; additional platelet biology research tools are available on our PF4 Antibody / Platelet Activation Marker Antibody page.

Application Notes

Optimal dilution of the Platelet Factor 4 Antibody / Platelet Alpha Granule Protein Antibody should be determined by the researcher.

Immunogen

Amino acids E32-S101 were used as the immunogen for the Platelet factor 4 antibody.

Storage

Prior to reconstitution, store at 4oC. After reconstitution, the Platelet factor 4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

PF4 Antibody, CXCL4 Antibody, Chemokine CXCL4 Antibody, C-X-C Motif Chemokine Ligand 4 Antibody, Platelet Chemokine Antibody, Heparin Binding Protein Antibody

Copyright © NSJ Bioreagents. All rights reserved.