

Glycoprotein 9 Antibody / Gp9 / CD42a (FY12598)

Catalog No.	Formulation	Size
FY12598	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human, Mouse
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P14770
Applications	Western Blot : 0.25-0.5ug/ml Immunohistochemistry : 2-5ug/ml
Limitations	This Glycoprotein 9 antibody is available for research use only.

Description

Glycoprotein 9 antibody detects Platelet glycoprotein IX, a membrane glycoprotein that forms part of the GPIb-IX-V complex essential for platelet adhesion and thrombus formation. Glycoprotein 9 functions as a structural subunit that stabilizes the GPIbalpha receptor, enabling platelet interaction with von Willebrand factor under high shear conditions. The Glycoprotein 9 antibody is widely used in hematology and cardiovascular research to study platelet function, coagulation, and bleeding disorders.

The protein is encoded by the GP9 gene on human chromosome 3q21.3. Glycoprotein 9 is approximately 177 amino acids long and contains a single leucine-rich repeat flanked by cysteine-rich regions, which maintain receptor conformation and complex assembly. It is expressed exclusively on platelet membranes and megakaryocytes, where it associates non-covalently with GPIbalpha and GPIbbeta to form the functional receptor complex for von Willebrand factor binding.

The Glycoprotein 9 antibody detects a 25 kilodalton band by western blot and shows strong membrane staining in platelets. The GPIb-IX-V complex mediates platelet tethering to exposed subendothelial matrix at sites of vascular injury, initiating platelet activation and aggregation. Defects or mutations in Glycoprotein 9 lead to Bernard-Soulier syndrome, characterized by thrombocytopenia, giant platelets, and impaired adhesion.

Beyond hemostasis, the GPIb-IX-V complex participates in inflammatory and immune signaling. Platelet Glycoprotein 9 contributes to leukocyte recruitment, vascular permeability, and thromboinflammatory responses. Overexpression or dysregulation has been associated with thrombosis and cardiovascular disease, making it an important target for antithrombotic therapy.

Because of its role in platelet adhesion and vascular integrity, Glycoprotein 9 is a critical biomarker for platelet-related disorders. NSJ Bioreagents provides a validated Glycoprotein 9 antibody optimized for western blot, flow cytometry, and immunofluorescence, supporting research into hemostasis, thrombosis, and vascular inflammation.

Application Notes

Optimal dilution of the Glycoprotein 9 antibody should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human CD42a/GP9 was used as the immunogen for the Glycoprotein 9 antibody.

Storage

After reconstitution, the Glycoprotein 9 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.