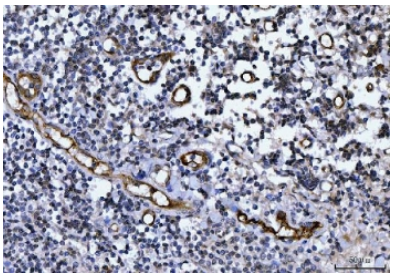
von Willebrand Factor Antibody / Hemostasis Research Antibody (RQ7212)

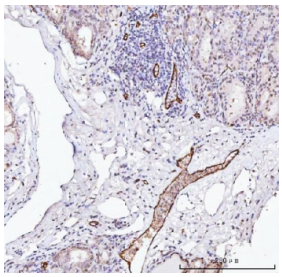
Catalog No.	Formulation	Size
RQ7212	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

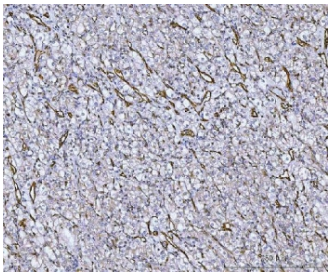
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P04275
Applications	Immunohistochemistry (FFPE): 2-5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This von Willebrand Factor antibody is available for research use only.



von Willebrand Factor Antibody / Hemostasis Research Antibody. Immunohistochemistry analysis of human tonsil tissue shows HRP-DAB brown staining of endothelial cells lining vascular channels within lymphoid tissue. The staining outlines elongated and branching vessel structures, with signal localized along the endothelial surface consistent with VWF presence at the vascular interface. This pattern reflects vessel-associated regions where VWF contributes to platelet adhesion and coagulation factor support in hemostatic processes. Endothelial-lined vessels are clearly distinguished from surrounding lymphoid cells and stromal components. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



von Willebrand Factor Antibody / Hemostasis Research Antibody. Immunohistochemistry analysis of human thyroid cancer tissue shows HRP-DAB brown staining of endothelial cells lining vascular channels within the tumor microenvironment. The staining highlights irregular and branching vessel structures embedded within tumor stroma, with signal localized along endothelial surfaces consistent with VWF presence at the vascular interface. This pattern reflects vessel-associated regions involved in platelet interaction and coagulation factor support within neoplastic tissue. Endothelial-lined vessels are clearly distinguished from surrounding tumor cells and stromal components. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



von Willebrand Factor Antibody / Hemostasis Research Antibody. Immunohistochemistry analysis of human renal cancer tissue shows HRP-DAB brown staining of endothelial cells forming an extensive network of vascular channels throughout the tumor microenvironment. The staining outlines numerous thin, branching vessel structures distributed between tumor cell clusters, with signal localized along endothelial surfaces consistent with VWF presence at the vascular interface. This pattern reflects widespread vascular involvement associated with platelet interaction and coagulation factor support within neoplastic tissue. Endothelial-lined vessels are clearly distinguished from surrounding tumor cells and stromal components. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Von Willebrand factor (VWF) is a secreted multimeric glycoprotein encoded by the VWF gene and synthesized primarily by vascular endothelial cells and megakaryocytes. von Willebrand Factor Antibody / Hemostasis Research Antibody recognizes a protein that plays a central and integrated role in the regulation of primary hemostasis and coagulation. VWF antibody, also referred to as von Willebrand factor antibody or factor VIII-related antigen antibody, is widely used in studies focused on clot formation, bleeding mechanisms, and vascular injury responses where coordinated hemostatic control is essential.

VWF functions at the interface of platelet recruitment and coagulation factor support, making it a key regulator of early clot formation. Following vascular injury, VWF binds to exposed subendothelial structures and undergoes conformational changes that promote platelet tethering under shear conditions. At the same time, VWF stabilizes coagulation factor VIII in circulation, protecting it from degradation and enabling downstream activation of the coagulation cascade. This dual functionality positions VWF as a central mediator linking primary hemostasis with secondary coagulation processes.

The hemostatic activity of VWF is closely dependent on its multimeric structure, with high-molecular-weight multimers providing the most effective platelet-binding capacity. These multimers are stored in endothelial Weibel-Palade bodies and platelet alpha-granules and are rapidly released in response to vascular injury or cellular activation. Once released, VWF participates in platelet aggregation and thrombus formation, contributing to the development of a stable hemostatic plug. This coordinated sequence of events highlights the importance of VWF in maintaining vascular integrity and preventing excessive blood loss.

Alterations in VWF expression, structure, or multimer distribution are directly linked to disorders of hemostasis. Reduced levels or dysfunctional forms of VWF can impair platelet adhesion and clot formation, leading to bleeding tendencies, while excessive or dysregulated VWF activity can contribute to thrombotic conditions. Because of this, VWF remains a central focus in research on bleeding disorders, thrombosis, and the balance between clot formation and vascular patency.

In experimental systems, detection of VWF provides a biologically meaningful readout of hemostatic potential and vascular response to injury. Its presence reflects both the capacity for platelet recruitment and the availability of coagulation factor support, allowing investigators to connect molecular findings with functional clotting outcomes. This makes von Willebrand Factor Antibody particularly valuable in studies examining coagulation pathways, vascular injury

models, and the molecular basis of hemostatic regulation.

von Willebrand Factor Antibody / Hemostasis Research Antibody is especially suited for investigations centered on clot initiation, coagulation factor dynamics, and the mechanisms that maintain vascular stability. By highlighting a protein that integrates platelet adhesion with coagulation support, it enables detailed analysis of the processes that govern normal hemostasis and its disruption in disease.

Application Notes

Optimal dilution of the von Willebrand Factor Antibody / Hemostasis Research Antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids R1287-Q2770) was used as the immunogen for the von Willebrand Factor Antibody / Hemostasis Research Antibody.

Storage

After reconstitution, the von Willebrand Factor 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

VWF hemostasis antibody, von Willebrand factor coagulation antibody, bleeding disorder research antibody, VWF clotting factor support antibody, primary hemostasis antibody

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