

Anti-VWF Picoband Antibody

Catalog # ABO11778

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	P04275
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for von Willebrand factor(VWF) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7450
Other Names	von Willebrand factor, vWF, von Willebrand antigen 2, von Willebrand antigen II, VWF, F8VWF
Calculated MW	309265
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat Immunohistochemistry(Frozen Section), 0.5-1 µg/ml Western blot, 0.1-0.5 µg/ml
Subcellular Localization	Secreted . Secreted, extracellular space, extracellular matrix . Localized to storage granules.
Tissue Specificity	Plasma.
Source	Eukaryota
Protein Name	von Willebrand factor
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human VWF recombinant protein (Position: R2535-K2813). Human VWF shares 79% amino acid (aa) sequence identity with mouse VWF.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20° C for one year. After reconstitution, at 4° C for one month. It can also

Sequence Similarities

be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
Contains 1 CTCK (C-terminal cystine knot-like) domain.

Protein Information

Name	VWF
Synonyms	F8VWF
Function	Important in the maintenance of hemostasis, it promotes adhesion of platelets to the sites of vascular injury by forming a molecular bridge between sub-endothelial collagen matrix and platelet- surface receptor complex GPIb-IX-V. Also acts as a chaperone for coagulation factor VIII, delivering it to the site of injury, stabilizing its heterodimeric structure and protecting it from premature clearance from plasma.
Cellular Location	Secreted. Secreted, extracellular space, extracellular matrix. Note=Localized to storage granules
Tissue Location	Plasma.

Background

Von Willebrand factor (VWF) is a blood glycoprotein involved in hemostasis. It is mapped to 12p13.31. The VWF gene encodes von Willebrand factor (VWF), a large multimeric glycoprotein that plays a central role in the blood coagulation system, serving both as a major mediator of platelet-vessel wall interaction and platelet adhesion, and as a carrier for coagulation factor VIII. VWF released from endothelial cell Weibel-Palade bodies bound particularly avidly to the extracellular matrix. VWF deficiency or dysfunction (von Willebrand disease) leads to a bleeding tendency, which is most apparent in tissues having high blood flow shear in narrow vessels.

Images

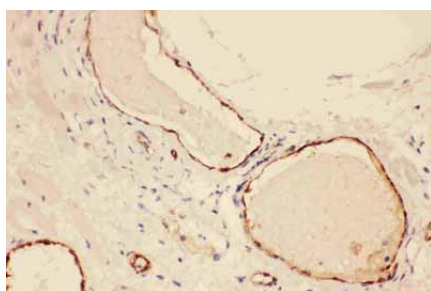
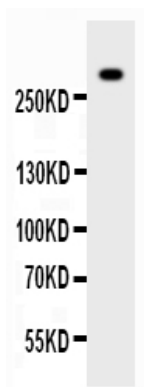


Figure 1. IHC analysis of VWF using anti-VWF antibody (ABO11778).VWF was detected in paraffin-embedded section of Human Lung Cancer Tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 µg/ml rabbit anti-VWF Antibody (ABO11778) overnight at 4 °C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 °C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Figure 2. Western blot analysis of VWF using anti-VWF antibody (ABO11778). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: HT1080 Whole Cell Lysate.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes.



Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-VWF antigen affinity purified polyclonal antibody (Catalog # ABO11778) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for VWF at approximately 309KD. The expected band size for VWF is at 309KD.

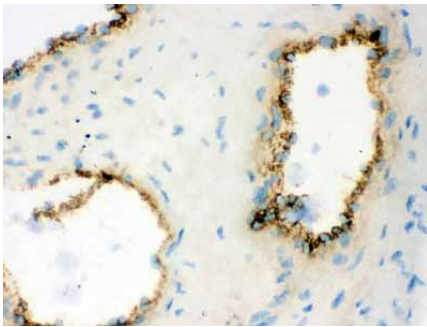


Figure 3. IHC analysis of VWF using anti-VWF antibody (ABO11778).VWF was detected in frozen section of human placenta tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti-VWF Antibody (ABO11778) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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