

Anti-Von Willebrand Factor/VWF Antibody Picoband™

Catalog Number: PB9062

About VWF

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.

Overview

Product Name	Anti-Von Willebrand Factor/VWF Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Von Willebrand Factor/VWF Antibody Picoband™ catalog # PB9062. Tested in Flow Cytometry, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human.
Application	Flow Cytometry, IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P04275

Technical Details

Immunogen	E.coli-derived human VWF recombinant protein (Position: R2535-K2813). Human VWF shares 79% amino acid (aa) sequence identity with mouse VWF.
Predicted Reactive Species	Bovine, Horse
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized





Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, By Heat Immunohistochemistry (Frozen Section), 0.5-1ug/ml Immunocytochemistry, 0.5-1ug/ml Flow Cytometry, 1-3ug/1x10 ⁶ cells



Anti-Von Willebrand Factor/VWF Antibody Picoband™ (PB9062) Images

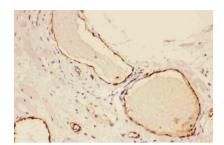


Figure 1. IHC analysis of VWF using anti-VWF antibody (PB9062).

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 1ug/ml rabbit anti-VWF Antibody (PB9062) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Figure 2. Western blot analysis of VWF using anti-VWF antibody (PB9062).

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 # PB9062) at 0.5 ug/mL overnight at 4°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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for VWF at approximately 309KD. The expected band size for VWF is at 309KD.

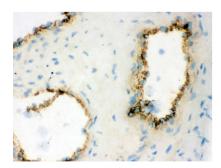


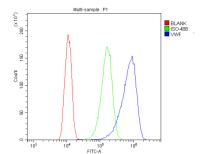
Figure 3. IHC analysis of VWF using anti-VWF antibody (PB9062).

VWF was detected in frozen section of human placenta tissue. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-VWF Antibody (PB9062) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Figure 4. Flow Cytometry analysis of A431 cells using anti-VWF antibody (PB9062).

Overlay histogram showing A431 cells stained with PB9062 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-VWF Antibody (PB9062, $1ug/1x10^6$ cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10⁶





cells) was used as secondary antibody for 30 minutes at 20° C. Isotype control antibody (Green line) was rabbit IgG ($1\text{ug}/1\text{x}10^{6}$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

34 Publications Citing This Product

- 1. PubMed ID: 10.3892/or.16.5.1021, Histological type of oncogenity and expression of cell cycle genes in tumor cells from human mesenchymal stem cells
- 2. PubMed ID: 10.1186/s12906-020-02968-7, The protective effects of angelica organic acid against ox-LDL-induced autophagy dysfunction of HUVECs
- 3. PubMed ID: 10.1371/journal.pone.0132743, IFI6 Inhibits Apoptosis via Mitochondrial-Dependent Pathway in Dengue Virus 2 Infected Vascular Endothelial Cells

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