Anti-Von Willebrand Factor Antibody [PSH07-45] HA722833

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Tissue, IP, mIHC, IHC-Fr
Molecular Wt:	Predicted band size: 309 kDa
Clone number:	PSH07-45

Description: Von Willebrand factor (VWF) is a blood glycoprotein that promotes hemostasis, specifically, platelet adhesion. It is deficient and/or defective in von Willebrand disease and is involved in many other diseases, including thrombotic thrombocytopenic purpura, Heyde's syndrome, and possibly hemolytic–uremic syndrome. Increased plasma levels in many cardiovascular, neoplastic, metabolic (e.g. diabetes), and connective tissue diseases are presumed to arise from adverse changes to the endothelium, and may predict an increased risk of thrombosis.

Immunogen: Recombinant protein within human Von Willebrand Factor aa 734-1,283.

Positive control: Human lung tissue lysate, Rat lung tissue lysate, human appendix tissue, human colon carcinoma tissue, human lung tissue, mouse lung tissue, rat lung tissue.

Subcellular location: Secreted, extracellular space, extracellular matrix.

Database links: SwissProt: P04275 Human | Q8CIZ8 Mouse | Q62935 Rat

Recommended Dilutions:

WB	1:5,000
IHC-P	1:500
IF-Tissue	1:100
IP	1-2μg/sample
mIHC	1:100
IHC-Fr	1:200

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

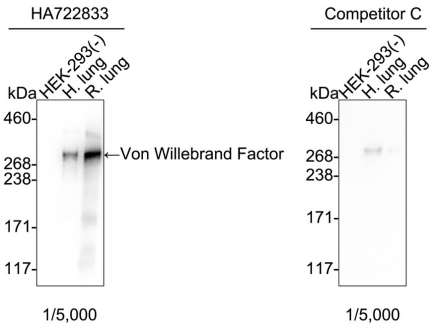

Fig1: Western blot analysis of Von Willebrand Factor on different lysates with Rabbit anti-Von Willebrand Factor antibody (HA722833) at 1/5,000 dilution and competitor's antibody at 1/5,000 dilution.

Lane 1: HEK-293 cell lysate (negative)
Lane 2: Human lung tissue lysate
Lane 3: Rat lung tissue lysate

Lysates/proteins at 30 µg/Lane.

Predicted band size: 309 kDa
Observed band size: 309 kDa

Exposure time: Lane 1-3 (left): 25 seconds; Lane 1-3 (right): 3 minutes; ECL: K1801;

3-8% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722833) at 1/5,000 dilution and competitor's antibody at 1/5,000 dilution were used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

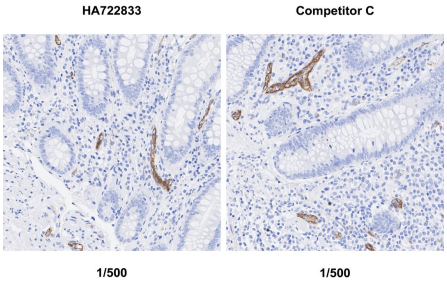

Fig2: Immunohistochemical analysis of paraffin-embedded human appendix tissue with Rabbit anti-Von Willebrand Factor antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

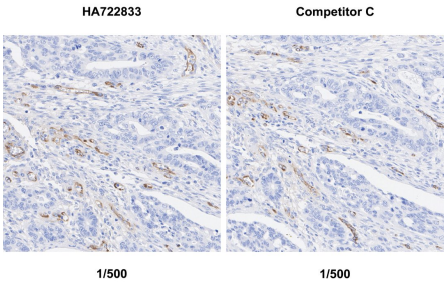

Fig3: Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue with Rabbit anti-Von Willebrand Factor antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

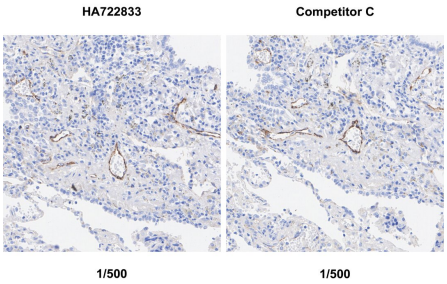

Fig4: Immunohistochemical analysis of paraffin-embedded human lung tissue with Rabbit anti-Von Willebrand Factor antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

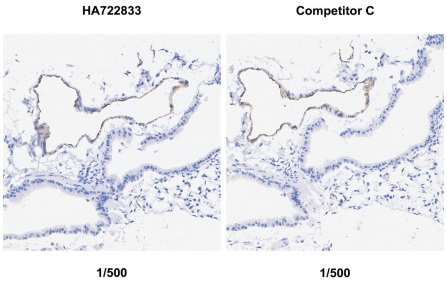

Fig5: Immunohistochemical analysis of paraffin-embedded mouse lung tissue with Rabbit anti-Von Willebrand Factor antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

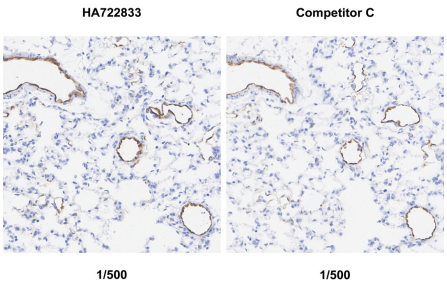

Fig6: Immunohistochemical analysis of paraffin-embedded rat lung tissue with Rabbit anti-Von Willebrand Factor antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722833) at 1/500 dilution and competitor's antibody at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

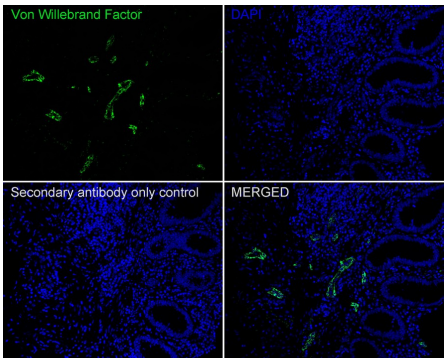

Fig7: Immunofluorescence analysis of paraffin-embedded human appendix tissue labeling Von Willebrand Factor with Rabbit anti-Von Willebrand Factor antibody (HA722833) at 1/100 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA722833, green) at 1/100 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

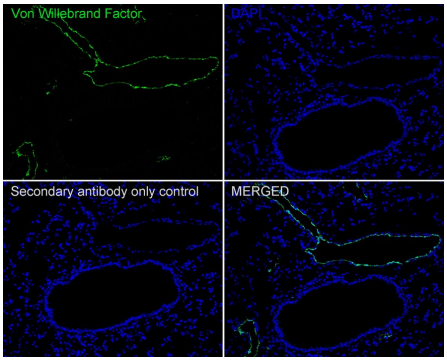

Fig8: Immunofluorescence analysis of paraffin-embedded rat lung tissue labeling Von Willebrand Factor with Rabbit anti-Von Willebrand Factor antibody (HA722833) at 1/100 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA722833, green) at 1/100 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

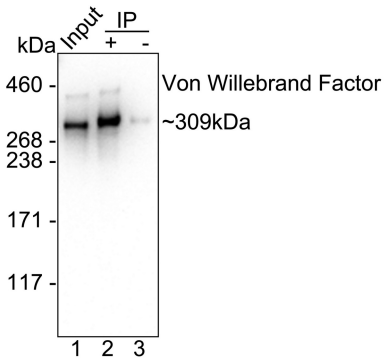

Fig9: Von Willebrand Factor was immunoprecipitated from 0.2 mg rat lung tissue lysate with HA722833 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA722833 at 1/1,000 dilution. Anti-Rabbit IgG for IP Nano-secondary antibody (NBI01H) at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: rat lung tissue lysate (input)
Lane 2: HA722833 IP in rat lung tissue lysate
Lane 3: Rabbit IgG instead of HA722833 in rat lung tissue lysate

Blocking/Dilution buffer: 5% NFDM/TBST
Exposure time: 1 minute 20 seconds; ECL: K1801

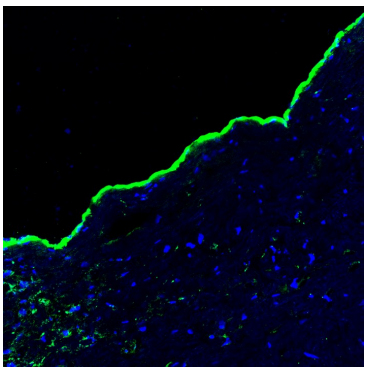

Fig10: Application: Immunofluorescence (IHC-Fr)

Species: Human
Tissue: Carotid plaque

Sample: Frozen section

Antigen retrieval: Not required

Primary antibody: HA722833, 1/200, overnight at 4℃.

Date by conrtesy of: Dr. Liao (From Xiong Lab), School of Basic Medical Sicences, Guangdong Medical University

Background References

1. Manz XD et al. Regulation of VWF (Von Willebrand Factor) in Inflammatory Thrombosis. Arterioscler Thromb Vasc Biol. 2022 Nov
2. Groeneveld D et al. Von Willebrand factor delays liver repair after acetaminophen-induced acute liver injury in mice. J Hepatol. 2020 Jan