

Product datasheet

Anti-Von Willebrand Factor antibody [EPR25069-131] ab287962

Recombinant RabMAb

1 References 13 Images

Overview	
Product name	Anti-Von Willebrand Factor antibody [EPR25069-131]
Description	Rabbit monoclonal [EPR25069-131] to Von Willebrand Factor
Host species	Rabbit
Specificity	This antibody does not react with cleaved von Willebrand antigen 2 as the immunogen is located at the C-terminus
Tested applications	Suitable for: IHC-P, WB, IHC-Fr, Flow Cyt, ICC/IF Unsuitable for: IP
Species reactivity	Reacts with: Mouse, Rat
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse platelet, Rat platelet lysates. IHC-P: Rat spleen, Mouse spleen, Mouse colon and Rat lung, Mouse pancreas tumor tissues. IHC-Fr: Mouse lung, Rat liver and Rat lung, Mouse liver tissues. Flow Cyt: Mouse blood cells. ICC/IF: bEnd.3 (mouse brain endothelial cell) cells
General notes	 This product is a recombinant monoclonal antibody, which offers several advantages including: High batch-to-batch consistency and reproducibility Improved sensitivity and specificity Long-term security of supply Animal-free production For more information <u>see here</u>. Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u>.

Properties	
Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR25069-131
lsotype	lgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab287962 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/50.
WB		1/1000. Predicted molecular weight: 309 kDa.
IHC-Fr		1/500.
Flow Cyt		1/500.
ICC/IF		Use at an assay dependent concentration.

Application notes

Is unsuitable for IP.

Target	
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.
Tissue specificity	Plasma.
Involvement in disease	Defects in VWF are the cause of von Willebrand disease (VWD) [MIM:277480]. VWD defines a group of hemorrhagic disorders in which the von Willebrand factor is either quantitatively or qualitatively abnormal resulting in altered platelet function. Symptoms vary depending on severity and disease type but may include prolonged bleeding time, deficiency of factor VIII and impaired platelet adhesion. Type I von Willebrand disease is the most common form and is characterized by partial quantitative plasmatic deficiency of an otherwise structurally and functionally normal Willebrand factor; type II is associated with a qualitative deficiency and functional anomalies of the Willebrand factor; type III is the most severe form and is characterized by total or near-total absence of Willebrand factor in the plasma and cellular compartments, also leading to a profound deficiency of plasmatic factor VIII.
Sequence similarities	Contains 1 CTCK (C-terminal cystine knot-like) domain. Contains 4 TIL (trypsin inhibitory-like) domains. Contains 3 VWFA domains. Contains 3 VWFC domains. Contains 4 VWFD domains.

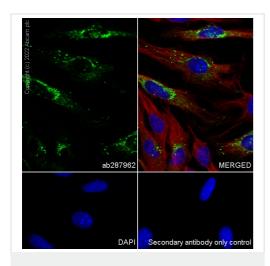
Domain

Post-translational modifications Cellular localization The von Willebrand antigen 2 is required for multimerization of vWF and for its targeting to storage granules.

All cysteine residues are involved in intrachain or interchain disulfide bonds. N- and O-glycosylated.

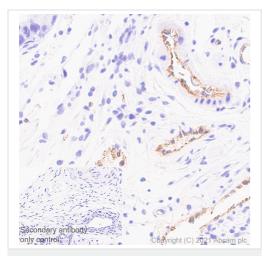
Secreted. Secreted > extracellular space > extracellular matrix. Localized to storage granules.

Images



Immunocytochemistry/ Immunofluorescence - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962) Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized bEnd.3 (mouse brain endothelial cell) cells labelling Von Willebrand Factor with ab287962 at 1/100 dilution (5.58 µg/ml) followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed secondary antibody used at 1/1000 dilution (2µg/ml) (Green). **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (2.5µg/ml) (Red). The Nuclear counterstain was DAPI (Blue).

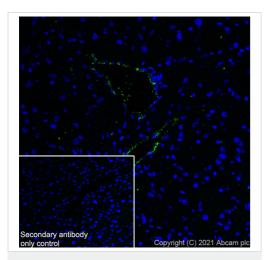
Confocal image showing cytoplasmic staining in bEnd.3 cell line. Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962)

Immunohistochemical analysis of paraffin-embedded Mouse pancreas tumor tissue labelling VonWillebrand Factor with ab287962 at 1/50 (11.1 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) . Cytoplasmic staining on endothelial of mouse pancreas tumor. The section was incubated with ab287962 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection).



Immunohistochemistry (Frozen sections) - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962) Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse liver (fresh) tissue labeling VonWillebrand Factor with ab287962 at 1/500 (1.11 ug/ml) dilution followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbed at 1/1000 (2 ug/mL) dilution (Green). Positive staining on the endothelial cells in mouse liver is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is <u>ab150081</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbedat 1/1000 (2 ug/mL) dilution.



Western blot - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962) **All lanes :** Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962) at 1/1000 dilution

Lane 1 : Mouse platelet lysate Lane 2 : Rat platelet lysate

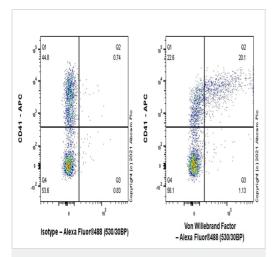
Secondary

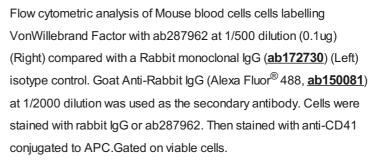
All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 309 kDa

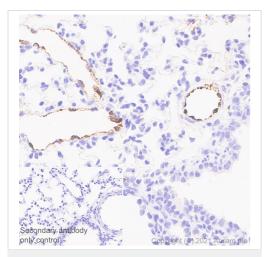
Blocking and diluting buffer and concentration: 5% NFDM/TBSTBands below 300kDa were VWF cleavage fragments(PMID: 21909423)

Exposure time: 70 seconds





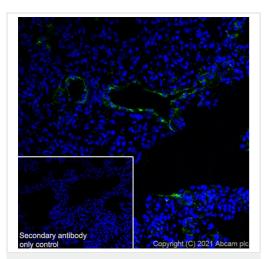




Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962)

Immunohistochemical analysis of paraffin-embedded Rat lung tissue labelling VonWillebrand Factor with ab287962 at 1/50 (11.1 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) . Cytoplasmic staining on endothelial cells of rat lung. The section was incubated with ab287962 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

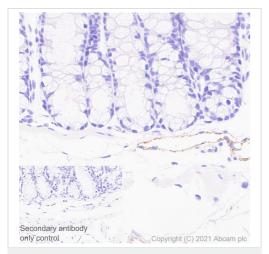
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection).



Immunohistochemistry (Frozen sections) - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat lung (fresh) tissue labeling VonWillebrand Factor with ab287962 at 1/500 (1.11 ug/ml) dilution followed by <u>ab150081</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbed at 1/1000 (2 ug/mL) dilution (Green). Positive staining on the vascular endothelial cells in rat lung is observed. The nuclear counterstain was DAPI (Blue).

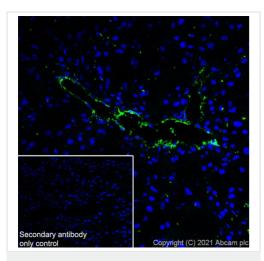
Secondary antibody control: Secondary antibody is <u>**ab150081**</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbed at 1/1000 (2 ug/mL) dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962)

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labelling VonWillebrand Factor with ab287962 at 1/50 (11.1 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) . Cytoplasmic staining on endothelial cells of mouse colon. The section was incubated with ab287962 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

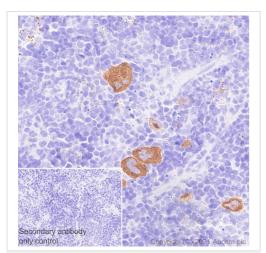
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection).



Immunohistochemistry (Frozen sections) - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat liver (fresh) tissue labeling VonWillebrand Factor with ab287962 at 1/500 (1.11 ug/ml) dilution followed by <u>ab150081</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbed at 1/1000 (2 ug/mL) dilution (Green). Positive staining on the endothelial cells in rat liver is observed. The nuclear counterstain was DAPI (Blue).

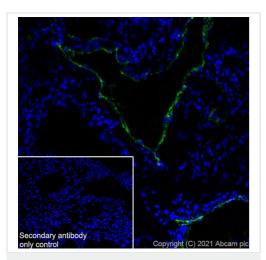
Secondary antibody control: Secondary antibody is <u>ab150081</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbedat 1/1000 (2 ug/mL) dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labelling VonWillebrand Factor with ab287962 at 1/50 (11.1 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond Polymer Refine Detection) . Cytoplasmic staining on megakaryocyte and platelets of mouse spleen. The section was incubated with ab287962 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

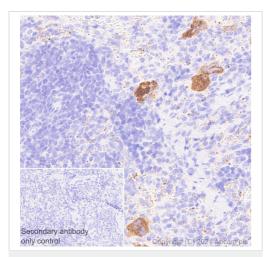
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond Polymer Refine Detection).



Immunohistochemistry (Frozen sections) - Anti-Von Willebrand Factor antibody [EPR25069-131] (ab287962)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse lung (fresh) tissue labeling VonWillebrand Factor with ab287962 at 1/500 (1.11 ug/ml) dilution followed by <u>ab150081</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbed at 1/1000 (2 ug/mL) dilution (Green). Positive staining on the vascular endothelial cells in mouse lung is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is <u>ab150081</u> Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) preadsorbedat 1/1000 (2 ug/mL) dilution.



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Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond [™] Polymer Refine Detection).



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