

For Research Use Only

# VWF Recombinant antibody, PBS Only (Capture)

Catalog Number: 83854-2-PBS



## Basic Information

<b>Catalog Number:</b> 83854-2-PBS	<b>GenBank Accession Number:</b> GeneID (NCBI): 7450	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>UNIPROT ID:</b> P04275	<b>CloneNo.:</b> 240867D10
<b>Source:</b> Rabbit	<b>Full Name:</b> von Willebrand factor	
<b>Isotype:</b> IgG	<b>Observed MW:</b> 309-320 kDa	
<b>Immunogen Catalog Number:</b> AG25578		

## Applications

**Tested Applications:**  
WB, IHC, IF-P, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, rat

## Product Information

83854-2-PBS targets VWF as part of a matched antibody pair:

MP00810-2: 83854-2-PBS capture and 83854-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

Von Willebrand factor (VWF) is a large multimeric glycoprotein found in blood plasma involved in hemostasis following vascular injury. Due to the multimeric nature of VWF, it can range in size from 500 to 20,000 kDa due to the differences in the number of subunits comprising the protein. Each subunit is approximately 250 kDa (PMID: 9759493). The biosynthesis of VWF in vivo is limited to endothelial cells (PMID: 4209883) and megakaryocytes (PMID: 2413071). VWF synthesized in endothelial cells is either released directly into the plasma via 27186a secretory pathway, or tubulized and stored in organelles unique to this cell type called Weibel-Palade bodies (PMID: 16459301). Whereas VWF synthesized in megakaryocytes is stored in the alpha granules of platelets (PMID: 2046403). The primary function of VWF is as an adhesive plasma glycoprotein, particularly factor VIII; an essential blood-clotting protein (PMID: 6982084). VWF is also important in platelet adhesion to wound sites by binding specifically to type I and type III collagen (PMID: 11098050), with larger VWF multimers being most effective (PMID: 24448155).

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

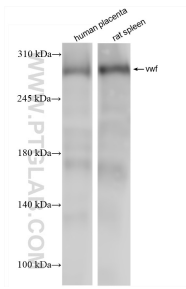
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

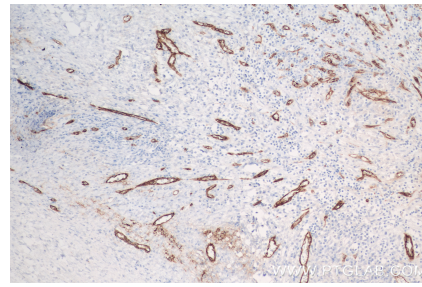
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

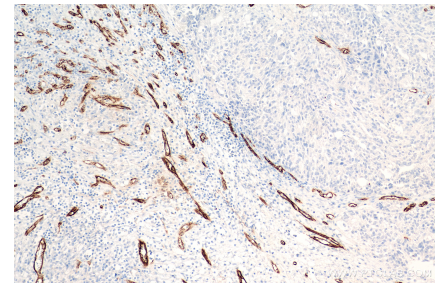
## Selected Validation Data



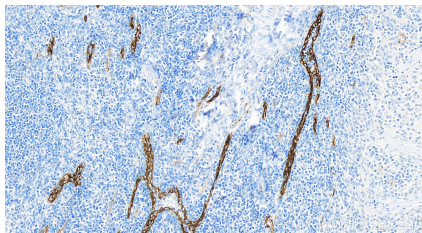
Various lysates were subjected to SDS PAGE followed by western blot with 83854-2-RR (vwf antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83854-2-PBS in a different storage buffer formulation.



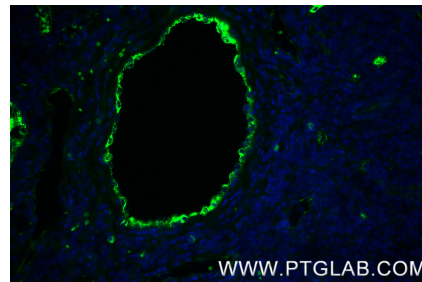
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83854-2-RR (VWF antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83854-2-PBS in a different storage buffer formulation.



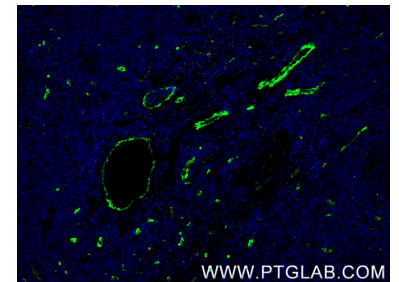
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 83854-2-RR (VWF antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83854-2-PBS in a different storage buffer formulation.



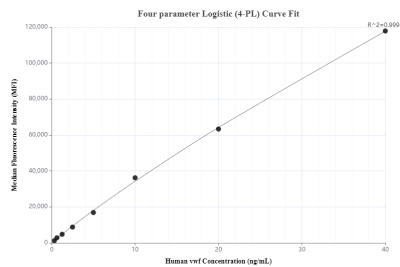
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 83854-2-RR (VWF antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83854-2-PBS in a different storage buffer formulation.



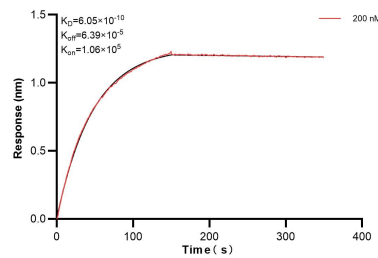
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human tonsillitis tissue using VWF antibody (83854-2-RR, Clone: 240867D10) at dilution of 1:1000 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83854-2-PBS in a different storage buffer formulation.



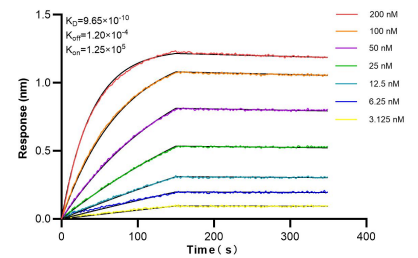
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Cytometric bead array standard curve of MP00810-2, VWF Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83854-2-PBS. Detection antibody: 83854-1-PBS. Standard: Ag25578. Range: 0.313-40 ng/mL



Biolayer interferometry (BLI) kinetic assay of 83854-2-PBS against Human VWF was performed. The affinity constant is 0.605 nM.



Biolayer interferometry (BLI) kinetic assays of 83854-2-RR against Human VWF were performed. The affinity constant is 0.965 nM.