

# VWF (H-300): sc-14014

## BACKGROUND

Von Willebrand disease is a congenital bleeding disorder caused by defects in the von Willebrand factor protein (VWF). VWF is a multimeric glycoprotein that is found in endothelial cells, plasma and platelets, and it is involved in the coagulation of blood at injury sites. VWF acts as a carrier protein for Factor VIII, a cofactor required for coagulation, and it promotes platelet adhesion and aggregation. Several factors are known to stimulate the binding of VWF to platelets, including glycoprotein 1b, ristocetin, botrocetin, collagen, sulphatides and heparin. Of the several domains contained within VWF, the A1, A2 and A3 domains have been shown to mediate this activation. VWF is thought to undergo a variety of posttranslational modifications that influence the affinity and availability for Factor VII, including cleavage of the propeptide and formation of N-terminal intersubunit disulfide bonds.

## CHROMOSOMAL LOCATION

Genetic locus: VWF (human) mapping to 12p13.31; Vwf (mouse) mapping to 6 F3.

## SOURCE

VWF (H-300) is a rabbit polyclonal antibody raised against amino acids 2514-2813 mapping at the C-terminus of VWF (Von Willebrand factor) of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

VWF (H-300) is recommended for detection of VWF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

VWF (H-300) is also recommended for detection of VWF in additional species, including canine.

Suitable for use as control antibody for VWF siRNA (h): sc-36828, VWF siRNA (m): sc-36829, VWF siRNA (r): sc-270212, VWF shRNA Plasmid (h): sc-36828-SH, VWF shRNA Plasmid (m): sc-36829-SH, VWF shRNA Plasmid (r): sc-270212-SH, VWF shRNA (h) Lentiviral Particles: sc-36828-V, VWF shRNA (m) Lentiviral Particles: sc-36829-V and VWF shRNA (r) Lentiviral Particles: sc-270212-V.

Molecular Weight of VWF: 250 kDa.

Positive Controls: HUV-EC-C whole cell lysate: sc-364180, human platelet extract: sc-363773 or mouse heart extract: sc-2254.

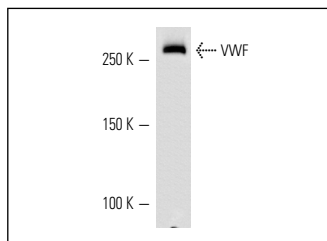
## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

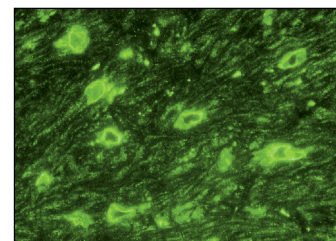
## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



VWF (H-300): sc-14014. Western blot analysis of VWF expression in human platelet extract.



VWF (H-300): sc-14014. Immunofluorescence staining of normal mouse heart frozen section showing blood vessel staining.

## SELECT PRODUCT CITATIONS

- Linn, T., et al. 2003. Angiogenic capacity of endothelial cells in islets of Langerhans. *FASEB J.* 17: 881-883.
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- Tamura, N. and Garbers, D.L. 2003. Regulation of the guanylyl cyclase-B receptor by alternative splicing. *J. Biol. Chem.* 278: 48880-48889.
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- DeMarco, V.G., et al. 2009. Rosuvastatin ameliorates the development of pulmonary arterial hypertension in the transgenic (mRen2)27 rat. *Am. J. Physiol. Heart Circ. Physiol.* 297: H1128-H1139.
- Helms, H.C., et al. 2010. Paracellular tightness and claudin-5 expression is increased in the BCEC/astrocyte blood-brain barrier model by increasing media buffer capacity during growth. *AAPS J.* 12: 759-770.
- Tang, J.M., et al. 2011. VEGF/SDF-1 promotes cardiac stem cell mobilization and myocardial repair in the infarcted heart. *Cardiovasc. Res.* 91: 402-411.
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