



## Goat Anti-Human von Willebrand Factor Whole IgG from antiserum 2.5 mg

Catalogue: **GAVWF-IG**

Lot: **SAMPLE**

Expiry date: **\*\*/\*\*\*\***

Store at **-10 to -20°C**.

For Research Use Only ~ Not for use in diagnostic procedures.

### Description of von Willebrand Factor (vWF)

von Willebrand Factor (vWF, also previously referred to as Factor VIII related antigen) is a large adhesive protein produced in endothelial cells and megakaryocytes. There are two critical functions of vWF, the first being its involvement in the process of platelet adhesion and aggregation through interaction with platelet receptor glycoprotein Ib, the second being the binding and stabilization of Factor VIII (antihemophilic factor) for secretion and transport in plasma. The vWF precursor protein is synthesized with a 95,000 dalton propeptide (also known as vWF antigen-II), believed to be involved in the intracellular multimerization of the vWF subunits. The mature vWF multimers are then packed into storage organelles within the cell (Weibel-Palade bodies) after which the propeptide is cleaved and released. vWF circulates as multimers of disulphide linked 220,000 dalton subunits and the molecular weight of these multimers ranges from 0.5-20 million daltons.

The plasma concentration of vWF is typically 10 ug/ml, but increased levels are often observed in pregnancy and other conditions of physiological stress. von Willebrand's disease (vWD) is perhaps the most common inherited bleeding disorder in humans and is the result of either quantitative deficiencies of vWF (vWD Types I & III), or one of a number of qualitative disorders of vWF structure and function (vWD Type II).

### References and Reviews

1. Montgomery RR, Collier BS, in Hemostasis and Thrombosis, 3<sup>rd</sup> Edition, eds. RW Colman, J Hirsh, VJ Marder and EW Salzman, pp. 134-168, J.B. Lippincott Co., Philadelphia PA., USA, 1994.
2. Sadler JE; von Willebrand Factor (Minireview); JBC 266:34, pp 22777-22780, 1991.

### Product Specifications

#### Description:

Vial containing 1.000 ml of IgG representing approximately 1 mL of antiserum. Total protein is 2.50 mg.

#### Format:

Whole IgG, clear liquid.

#### Host Animal:

Goat

#### Immunogen:

Human vWF purified from plasma.

#### Concentration:

IgG concentration is 2.5 mg/ml, determined by absorbance using an extinction coefficient ( $E_{280}^{1\%}$ ) of 13.4.

#### Buffer:

10mM HEPES, pH 7.4, 150mM NaCl, 50% (v/v) glycerol.

#### Storage:

Store between -10 and -20 °C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

#### Specificity:

This antibody is specific for vWF as demonstrated by immunoelectrophoresis and ELISA.

#### Applications:

Suitable for use as a source of antibodies to vWF.

### Related Products

|           |                                                 |
|-----------|-------------------------------------------------|
| GAVWF-HRP | Goat Anti-Human vWF, IgG-peroxidase             |
| GAVWF-AP  | Goat Anti-Human vWF, affinity purified IgG      |
| VWF-EIA   | Paired antibody set ELISA of vWF, 5x96 wells    |
| VWF-DP    | Plasma deficient in vWF/F.VIII, immune depleted |

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