

REPRESENTATIVE DATASHEET



Goat anti-human von Willebrand Factor FITC-Conjugated Affinity-Purified IgG 0.1 mg

Product #: GAVWF-APFTC
Lot #: XXXX
Expiry date: XXXX

Store at 2°C to 8°C

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

Description of von Willebrand Factor

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 µg/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).

REVIEW ARTICLES

1. Montgomery RR, Collier BS, in Hemostasis and Thrombosis, 3rd 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 XXXX mL of affinity-purified IgG conjugated to fluorescein isothiocyanate (FITC). Total protein is 0.1 mg.

Format:

APIgG-FITC conjugate as a clear yellow liquid.

Host Animal:

Goat

Immunogen:

Human vWF purified from plasma.

Concentration:

APIgG-FITC concentration is XXXX mg/mL, determined by absorbance using an extinction coefficient ($E^{1\%_{280}}$) of 14.

Buffer:

Phosphate-buffered saline containing 1 mg/mL bovine albumin and 0.1% sodium azide (w/v), pH 7.4.

Storage:

Store at 2°C to 8°C and protect from light.

Specificity:

Prior to conjugation, this antibody was specific for vWF as demonstrated by immunoelectrophoresis and ELISA.

Applications:

Suitable as a source of fluorescein labeled antibodies to vWF.

Incorporation of FITC:

XXXX moles fluorescein per mole IgG as determined spectrophotometrically.