

human von Willebrand Factor – FVIII Free

REF 2042

Description

Von Willebrand Factor (vWF) is a multimeric glycoprotein that circulates in plasma at a concentration of approximately 10 µg/mL, composed of 260,000 Da subunits held together by disulfide bonds. vWF exists in plasma in various forms, from as small as a dimer with a Mr equal to 520,000 Da to large multimers with Mr equal to 10,000,000 Da.

vWF plays a dual role in normal hemostasis. One role is to facilitate platelet plug formation by forming a bridge between Platelet Glycoprotein 1b and exposed collagen in the sub endothelium. Its second function is to act as a stabilizing cofactor for Factor VIII (FVIII), binding to and delivering functional FVIII. FVIII binds to the amino terminal portion of vWF subunit in a 1:1 molar ratio. Von Willebrand Disease (vWD) is characterized by a decrease in the ability for this bridge to be formed, or as a decrease in biological activity as a result of either a vWF protein deficiency or the presence of abnormal vWF protein.

vWF is purified from citrated human plasma. This preparation is free of FVIII.

Properties

Molecular Weight	260,000 Da (monomer), 10,000,000 Da (multimer)
Specific Activity	Not Determined
Σ1%, 1 cm, 280 nm	Not Available

Purity

Greater than 95% human vWF, per 10% SDS-PAGE analysis under reducing conditions.

Presentation

Plastic microfuge tubes containing 100 µg purified vWF in 25 mM sodium citrate, 0.1M glycine, 0.1M NaCl, pH 6.8. See vial label for the lot specific volume fill.

Warning

The source material for this reagent has been found to be non-reactive for Hepatitis B Surface Antigen (HBsAg), Hepatitis C Virus (HCV) and Human Immunodeficiency Virus Type 1 and Type 2 (HIV-1, HIV-2) using FDA Approved methods. As no known test method can provide complete assurance that products derived from human blood will not transmit HBsAg, HCV, HIV-1, HIV-2 or other blood-borne pathogens, this reagent should be handled as recommended for any potentially infectious human specimen.

Storage

Store at -70°C. Thaw rapidly at 37°C with only gentle agitation.

Related Products

REF 828, IMUBIND® vWF ELISA.

REF 885, IMUBIND® vWF Activity.