



Product Datasheet

Product Name	Factor VIII Related Antigen Human Recombinant
Cata No	CB501118
Source	<i>Escherichia Coli.</i>
Synonyms	von Willebrand factor, vWF, F8VWF, VWD, Factor VIII Related Antigen, Factor-VIII RA.

Description

Factor VIII related antigen or von Willebrand factor is a multimeric glycoprotein. It has functional binding domains to platelet glycoprotein Ib, glycoprotein IIb/IIIa, collagen and heparin. von Willebrand factor is synthesized by endothelial cells and stored in the Weibel-Palade granules. It mediates platelet adhesion to injured vessel walls and serves as a carrier and stabilizer for coagulation factor VIII. von Willebrand factor is one of the most useful markers to identify endothelial (or megakaryocytic) lineage of neoplasms. As not all endothelial cells synthesize / store) this molecule, about 30% of tumors of vascular origin fail to stain for factor VIII related antigen, regardless of whether they are benign or malignant. Staining for factor VIII related antigen has also been used to measure angiogenesis, an indicator of tumor recurrence. vWF functions as both an antihemophilic factor carrier and a platelet-vessel wall mediator in the blood coagulation system. vWF is critical to the hemostasis process. vWF is deficient or defective in von Willebrand disease and is involved in a large number of other diseases, including thrombotic thrombocytopenic purpura, Heyde's syndrome, and possibly hemolytic-uremic syndrome. vWF is produced constitutively in the endothelium (in the Weibel-Palade bodies), in the megakaryocytes (α -granules of platelets), and in the subendothelial connective tissue. Since Von

Willebrand factor is not an enzyme it has no catalytic activity. vWF's principal function is binding to other proteins, mainly to Factor VIII and it is essential in platelet adhesion to wound sites. Factor VIII is attached to vWF while inactive in the circulation. Factor VIII degrades quickly when not attached to vWF.

Factor VIII Related Antigen Human Recombinant (aa 2597-2791) expressed in E.coli, shows a 48 kDa band on SDS-PAGE.

The Factor-VIII RA is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear solution.

Formulation

Factor VIII Related Antigen in 50mM Tris-Acetate, pH7.5, 1mM EDTA and 20% Glycerol.

Stability

Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months.

Please prevent freeze-thaw cycles.

Applications

- ELISA
- Inhibition Assays
- Western Blotting

*** For Non-Clinical Research Use Only ***