Data Sheet (Cat.No.TMPY-01075)

Von Willebrand Factor/vWF Protein, Human, Recombinant (His)

General Information

Synonyms:	von Willebrand factor;VWD;F8VWF
Protein Construction:	A DNA sequence encoding the pro form of human von Willebrand factor (AAB59458.1) (Met1-Lys2813) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Ala 23
Species:	Human
Expression Host:	CHO Cells
Accession:	AAB59458.1
Molecular Weight:	308 kDa (predicted); 260 and 350 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Immobilized BDD-FVIII at 2 μg/mL (100 μL/well) can bind Von Willebrand Factor/vWF Protein, Human, Recombinant (His) (Cat#TMPY-01075), with a linear range of 0.16-4.0 μg/mL.
Purity:	≥ 75 % as determined by SDS-PAGE. ≥ 95 % as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

Von Willebrand Factor (VWF) is a multimeric glycoprotein involved in hemostasis in blood, binds receptors on the surface of platelets and in connective tissue, thereby mediating the adhesion of platelets to sites of vascular injury. From studies it appears that VWF protein uncoils under these circumstances, decelerating passing platelets. VWF protein is deficient or defective in von Willebrand disease (VWD) and is involved in a large number of other diseases, including thrombosis, thrombotic thrombocytopenic purpura, Stroke, Heyde's syndrome, possibly

hemolytic-uremic syndrome and so on.

Reference

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Bowen DJ. (2010) Sugar targets VWF for the chop. Blood. 115(13):2565.
Lpez JA,et al.(2010) VWF self-association: more bands for the buck. Blood. 116(19):3693-4.

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