

32-3783: F8 Recombinant Protein

Alternative Name : Coagulation factor VIII, Procoagulant component, Antihemophilic factor, AHF, F8, F8C, F8B, HEMA, FVIII, DXS1253E, F8 protein.

Description

Coagulation factor VIII participates in the intrinsic pathway of blood coagulation; factor VIII is a cofactor for factor IXa which, in the presence of Ca²⁺ and phospholipids, converts factor X to the activated form Xa. This gene produces two alternatively spliced transcripts. Transcript variant 1 encodes a large glycoprotein, isoform a, which circulates in plasma and associates with von Willebrand factor in a noncovalent complex. This protein undergoes multiple cleavage events. Transcript variant 2 encodes a putative small protein, isoform b, which consists primarily of the phospholipid binding domain of factor VIIIc. This binding domain is essential for coagulant activity. Defects in this gene results in hemophilia A, a common recessive X-linked coagulation disorder.

Antihemophilic Factor Human Recombinant produced in CHO is a glycosylated polypeptide chain having 2322 amino acids. The Factor-VIII is purified by proprietary chromatographic techniques.

Product Info

Amount : 500IU
Purification : Greater than 97.0% as determined by SDS-PAGE.
Content : Each 250IU vial was lyophilized from a solution containing 8mg Tween-80, 112mM NaCl, 40mg Mannitol, 10mg Trehalose, 1ng VWF and 4.2mM CaCl₂.
Storage condition : Lyophilized Factor-VIII although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Factor-VIII should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Application Note

It is recommended to reconstitute 250IU lyophilized Factor-VIII in 5ml sterile 18M-cm H₂O, which can then be further diluted to other aqueous solutions. The specific activity was found to be 7,058 IU/mg.