



Product Datasheet

Product Name	Factor-VIII Human Recombinant
Cata No	CB500939
Source	CHO cells (<i>Chinese Hamster Ovarian Cells</i>)
Synonyms	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 Ca⁺² 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 a total amino acids of 1438 (170kd) and consisting of two dimer chains 80 kD and 90 kD. The Factor-VIII is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The specific activity was found to be 6917IU/mg

Purity

Greater than 97.0% as determined by SDS-PAGE.

Formulation

The protein was lyophilized from a solution containing 50mM histidine, 0.3M NaCl, 5mM CaCl₂, 0.02% Tween 80, 20mM sucrose, pH- 6.8.

Reconstitution

It is recommended to reconstitute the lyophilized Factor-VIII in 1ml sterile 18MΩ-cm H₂O, which can then be further diluted to other aqueous solutions.

Stability

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.

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