

# **California Bioscience**

# **Product Datasheet**

Product Name	Factor VIII Human
Cata No	CB500938
Source	Human Plasma
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<sup>+2</sup> 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.

Human Facor VIII produced from Human Plasma is effective in the correction and prevention of severe bleeding episodes attributed to Factor VIII deficiency.

The Factor-VIII is purified by proprietary chromatographic techniques.

#### **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried)

#### powder.

#### **Biological Activity**

The potency per mg was tested and found to be 150 Units/mg.

#### Formulation

The lyophilized protein 200IU/ml was lyophilized from a sterile solution containing 1.5% Glycine, 160mM Calcium chloride and 25mM NaCitrate and 25mM NaCI.

#### Reconstitution

It is recommended to reconstitute the lyophilized Factor-VIII in sterile  $18M\Omega$ -cm H2O at a concentration of 200IU/mI, which can then be further diluted to other aqueous solutions. Make sure that the vial has reached room temperature prior to its reconstitution, otherwise it might precipitate.

### Stability

Lyophilized Factor-VIII although stable at room temperature for 1 week, should be stored desiccated between 2-8°C. Upon reconstitution Factor-VIII should be storedat 4°C.