abcam

Product datasheet

Recombinant Human Factor VIII protein ab158403

1 Image

Description

Product name	Recombinant Human Factor VIII protein
Expression system	Wheat germ
Accession	P00451-2
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MRIQDPGKVFFGNVDSSGIKHNIFNPPIIARYIRLHPTHYSIRS TLRMEL MGCDLNSCSMPLGMESKAISDAQITASSYFTNMFATWSP SKARLHLQGRS NAWRPQVNNPKEWLQVDFQKTMKVTGVTTQGVKSLLTS MYVKEFLISSSQ DGHQWTLFFQNGKVKVFQGNQDSFTPVVNSLDPPLLTRY LRIHPQSWVHQ IALRMEVLGCEAQDLY
Predicted molecular weight	51 kDa including tags
Amino acids	1 to 216
Tags	GST tag N-Terminus
Additional sequence information	Full length protein for Isoform 2 of Factor VIII. Also known as: F8B.

Specifications

Our Abpromise guarantee covers the use of **ab158403** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot ELISA
Form	Liquid
Additional notes	

Preparation and Storage

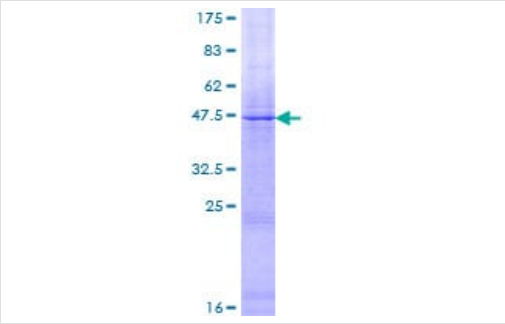
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function	Factor VIII, along with calcium and phospholipid, acts as a cofactor for factor IXa when it converts factor X to the activated form, factor Xa.
Involvement in disease	Defects in F8 are the cause of hemophilia A (HEMA) [MIM:306700]. A disorder of blood coagulation characterized by a permanent tendency to hemorrhage. About 50% of patients have severe hemophilia resulting in frequent spontaneous bleeding into joints, muscles and internal organs. Less severe forms are characterized by bleeding after trauma or surgery. Note=Of particular interest for the understanding of the function of F8 is the category of CRM (cross-reacting material) positive patients (approximately 5%) that have considerable amount of F8 in their plasma (at least 30% of normal), but the protein is non-functional; i.e., the F8 activity is much less than the plasma protein level. CRM-reduced is another category of patients in which the F8C antigen and activity are reduced to approximately the same level. Most mutations are CRM negative, and probably affect the folding and stability of the protein.
Sequence similarities	Belongs to the multicopper oxidase family. Contains 3 F5/8 type A domains. Contains 2 F5/8 type C domains. Contains 6 plastocyanin-like domains.
Domain	Domain F5/8 type C 2 is responsible for phospholipid-binding and essential for factor VIII activity.
Post-translational modifications	Sulfation on Tyr-1699 is essential for binding vWF.
Cellular localization	Secreted > extracellular space.

Images



SDS-PAGE - Recombinant Human Factor VIII protein (ab158403)

ab158403 on a 12.5% SDS-PAGE stained with Coomassie Blue.

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