Datasheet for ABIN7195158

Coagulation Factor X Protein (F10) (His tag)

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Overview

Quantity:	50 µg
Target:	Coagulation Factor X (F10)
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Coagulation Factor X protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Coagulation Factor X/F10 Protein (His Tag)
Sequence:	Met 1-Lys 488
Characteristics:	A DNA sequence encoding the full length of human coagulation factor X (NP_000495.1) (Met 1-Lys 488) was expressed with a polyhistidine tag at the C-terminus.
Purity:	> 97 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	Coagulation Factor X (F10)
Alternative Name:	Coagulation Factor X/F10 (F10 Products)
Background:	Background: Coagulation factor X, also known as FX, F10, Eponym Stuart-Prower factor, and thrombokinase, is an enzyme of the coagulation cascade. It is one of the vitamin K-dependent serine proteases, and plays a crucial role in the coagulation cascade and blood clotting, as the

Target Details

	first enzyme in the common pathway of thrombus formation. Factor X deficiency is one of the rarest of the inherited coagulation disorders. FX deficiency among the most severe of the rare coagulation defects, typically including hemarthroses, hematomas, and umbilical cord, gastrointestinal, and central nervous system bleeding. Factor X is synthesized in the liver as a mature heterodimer formed from a single-chain precursor, and vitamin K is essential for its synthesis. Factor X is activated into factor Xa (FXa) by both factor IX (with its cofactor, factor VIII in a complex known as intrinsic Xase) and factor VII (with its cofactor, tissue factor in a complex known as extrinsic Xase) through cleaving the activation propeptide. As the first member of the final common pathway or thrombin pathway, FXa converts prothrombin to thrombin in the presence of factor Va, Ca2+, and phospholipid during blood clotting and cleaves prothrombin in two places (an arg-thr and then an arg-ile bond). This process is optimized when factor Xa is complexed with activated cofactor V in the prothrombinase complex. Inborn deficiency of factor X is very uncommon, and may present with epistaxis (nose bleeds), hemarthrosis (bleeding into joints) and gastrointestinal blood loss. Apart from congenital deficiency, low factor X levels may occur occasionally in a number of disease states. Furhermore, factor X deficiency may be seen in amyloidosis, where factor X is adsorbed to the amyloid fibrils in the vasculature. Synonym: Coagulation factor 10,coagulation factor X,FX,FXA
Molecular Weight:	52.8 kDa
NCBI Accession:	NP_000495

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 50 mM Tris, 100 mM NaCl, pH 8.0, 10 % glycerol
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.