

Rabbit Anti-Factor X antibody

SL9501R

Product Name:	Factor X
Chinese Name:	凝血因子10抗体
Alias:	Activated factor Xa heavy chain; Coagulation factor; Coagulation factor X; EC 3.4.21.6; F10 antibody FA10_HUMAN; Factor Xa; FX; FXA; OTTHUMP00000018735; Prothrombinase; Stuart factor; Stuart Prower factor; Coagulation factor X; Factor X heavy chain.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	29/34/50kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Activated factor Xa heavy chain:401-488/488
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Hemostasis following tissue injury involves the deployment of essential plasma procoagulants (Prothrombin and Factors X, IX, V and VIII), which are involved in a blood coagulation cascade that leads to the formation of insoluble Fibrin clots and the

promotion of platelet aggregation. Coagulation Factor X (Stuart Prower factor, FX, F10) is a vitamin K-dependent, single chain serine protease that is synthesized in the liver and circulates as an inactive precursor. The mature form of Factor X (Factor X A) is generated by Factor IX A- or Factor VII A-mediated cleavage at the tripeptide sequence, Arg-Lys-Arg, to yield a disulfide linked dimer. Together with the cofactor Factor V A and Ca2+ on the surface of platelets or endothelial cells, Factor X A coordinates as part of the prothrombinase complex, which mediates proteolysis of Prothrombin into active Thrombin. Mutations at the Factor X locus resulting in Factor X deficiencies can contribute to hemorrhagic diathesis.

Function:

Factor Xa is a vitamin K-dependent glycoprotein that converts prothrombin to thrombin in the presence of factor Va, calcium and phospholipid during blood clotting.

Subunit:

The two chains are formed from a single-chain precursor by the excision of two Arg residues and are held together by 1 or more disulfide bonds. Forms a heterodimer with SERPINA5.

Subcellular Location:

Plasma; synthesized in the liver

Tissue Specificity:

Secreted

Post-translational modifications:

The vitamin K-dependent, enzymatic carboxylation of some glutamate residues allows the modified protein to bind calcium. [PTM] N- and O-glycosylated. O-glycosylated with core 1 or possibly core 8 glycans. [PTM] The activation peptide is cleaved by factor IXa (in the intrinsic pathway), or by factor VIIa (in the extrinsic pathway). The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.

DISEASE:

Defects in F10 are the cause of factor X deficiency (FA10D) [MIM:227600]. A hemorrhagic disease with variable presentation. Affected individuals can manifest prolonged nasal and mucosal hemorrhage, menorrhagia, hematuria, and occasionally hemarthrosis. Some patients do not have clinical bleeding diathesis.

Similarity:

Belongs to the peptidase S1 family.

Contains 2 EGF-like domains.

Contains 1 Gla (gamma-carboxy-glutamate) domain.

Contains 1 peptidase S1 domain.

SWISS:

	P00742
	Gene ID: 2159
	Database links:
	Entrez Gene: 2159Human
	Omim: 227600Human
	SwissProt: P00742Human
	Unigene: 361463Human
	Important Note:
	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	63— 48— 35— 25— 20— 17—
	Sample: Plasma (Mouse) Lysate at 40 ug
	Plasma (Rat) Lysate at 40 ug

Primary: Anti-Factor X (SL9501R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 29/34/50 kD

Observed band size: 29 kD

