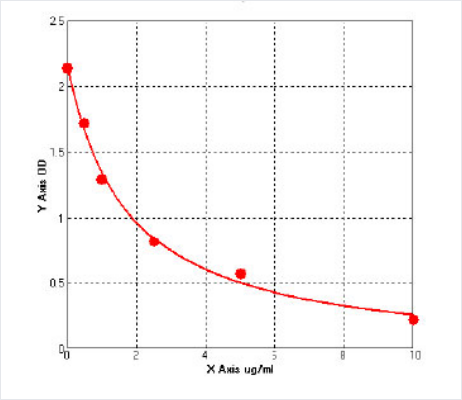
Coagulation Factor X (F10) ELISA Kit for Monkey

PRODUCT OVERVIEW

Product Name	Coagulation Factor X (F10), ELISA Kit
Full Product Name	Monkey Coagulation Factor X ELISA Kit
Product Gene Name	F10 elisa kit
Species Reactivity	Monkey
Assay Type	Quantitative Competitive
Samples	Serum, plasma, cell culture supernatants, body fluid and tissue homogenate
Sensitivity	0.1 ug/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of F10. No significant cross-reactivity or interference between F10 and analogues was observed. NOTE: Limited by current skills and knowledge, it is impossible for us to complete the cross-reactivity detection between F10 and all the analogues, therefore, cross reaction may still exist in some cases.
Preparation and Storage	Store all reagents at 2-8 degree C.
Molecular Weight	54,732 Da
OMIM	613872
Sample Preparation	We suggest pre-experimenting with neat (undiluted) samples, 1:2 or 1:4 dilutions. Please avoid diluting your samples more than 1:10 as it would exceed the dilution limit set for this kit. If the expected concentration of the target is beyond the detection range of the kit, please contact our technical support team
ISO Certification	Manufactured in an ISO 13485:2016 Certified Laboratory.
Related Product Information for F10 elisa kit	Intended Uses: This F10 ELISA kit is a 1.5 hour solid-phase ELISA designed for the quantitative determination of Monkey F10. This ELISA kit for research use only, not for therapeutic or test applications! Principle of the Assay: F10 ELISA kit applies the competitive enzyme immunoassay technique utilizing an anti-F10 antibody and an F10-HRP conjugate. The assay sample and buffer are incubated together with F10-HRP conjugate in pre-coated plate for one hour. After the incubation period, the wells are decanted and washed five times. The wells are then incubated with a substrate for HRP enzyme. The product of the enzyme-substrate reaction forms a blue colored complex. Finally, a stop solution is added to stop the reaction, which will then turn the solution yellow. The intensity of color is measured spectrophotometrically at 450nm in a microplate reader. The intensity of the color is inversely proportional to the F10 concentration since F10 from samples and F10-HRP conjugate compete for the anti-F10 antibody binding site. Since the number of sites is limited, as more sites are occupied by F10 from the sample, fewer sites are left to bind F10-HRP conjugate. A standard curve is plotted relating the intensity of the color (O.D.) to the concentration of standards. The F10 concentration in each sample is interpolated from this standard curve.
Other Notes	Small volumes of F10 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for F10 purchase	MBS735040 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Coagulation Factor X (F10) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing F10. The ELISA analytical biochemical technique of the MBS735040 kit is based on F10 antibody-F10 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect F10 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, F10. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of F10 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for F10. It may not necessarily be applicable to this product.

NCBI GI #	182390
NCBI GeneID	2159
NCBI Accession #	AAA52421.1
UniProt Secondary Accession #	Q14340
UniProt Related Accession #	P00742
NCBI Official Full Name	coagulation factor X
NCBI Official Synonym Full Names	coagulation factor X
NCBI Official Symbol	F10
NCBI Official Synonym Symbols	FX; FXA
UniProt Protein Name	Coagulation factor X
UniProt Synonym Protein Names	Stuart factor; Stuart-Prower factorCleaved into the following 3 chains:Factor X light chain; Factor X heavy chain; Activated factor Xa heavy chain
Protein Family	Coagulation factor
UniProt Gene Name	F10
UniProt Entry Name	FA10_HUMAN
NCBI Protein Information	coagulation factor X; factor Xa; prothrombinase; Stuart-Prower factor
NCBI Summary for F10	This gene encodes the vitamin K-dependent coagulation factor X of the blood coagulation cascade. This factor undergoes multiple processing steps before its preproprotein is converted to a mature two-chain form by the excision of the tripeptide RKR. Two chains of the factor are held together by 1 or more disulfide bonds; the light chain contains 2 EGF-like domains, while the heavy chain contains the catalytic domain which is structurally homologous to those of the other hemostatic serine proteases. The mature factor is activated by the cleavage of the activation peptide by factor IXa (in the intrisic pathway), or by factor VIIa (in the extrinsic pathway). The activated factor then converts prothrombin to thrombin in the presence of factor Va, Ca+2, and phospholipid during blood clotting. Mutations of this gene result in factor X deficiency, a hemorrhagic condition of variable severity. [provided by RefSeq, Jul 2008]

UniProt Comments for F10	F10: 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. Defects in F10 are the cause of factor X deficiency (FA10D). 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. Belongs to the peptidase S1 family. Protein type: Lipid-binding; Secreted, signal peptide; EC 3.4.21.6; Protease; Secreted; Motility/polarity/chemotaxis Chromosomal Location of Human Ortholog: 13q34 Cellular Component: endoplasmic reticulum lumen; Golgi lumen; extracellular region; plasma membrane Molecular Function: protein binding; serine-type endopeptidase activity; phospholipid binding; calcium ion binding Biological Process: positive regulation of protein kinase B signaling cascade; blood coagulation, extrinsic pathway; cellular protein metabolic process; blood coagulation; post-translational protein modification; proteolysis; peptidyl-glutamic acid carboxylation; blood coagulation, intrinsic pathway; positive regulation of cell migration Disease: Factor X Deficiency
Research Articles on F10	**1.** Prothrombin is proteolytically converted by factor Xa to the active protease thrombin in a reaction that is accelerated >3,000-fold by cofactor Va.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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