

Factor XI Assay Kit

Human Factor XI total antigen ELISA assay

CATALOG #
AAA71796

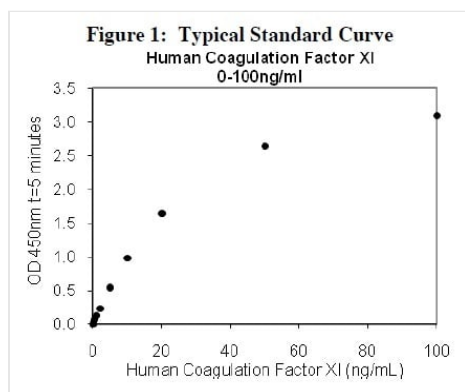
PRODUCT SYNONYMS

Factor XI; Human Factor XI total antigen ELISA assay; Hu. Coagulation Factor XI ELISA; Factor XI assay kit

PRODUCT SPECIFICATIONS

Sequence Length	18
Procedural Notes	1. Use aseptic technique when opening and dispensing reagents. 2. This kit is designed to work properly as provided and instructed. Additions, deletions, or substitutions to the procedure or reagents are not recommended, as they may be detrimental to the assay. 3. Exercise universal precautions during the performance or handling of this kit or any component contained therein.
Sample Collection and Preparation	The assay measures total human Factor XI in the 0.1-100 ng/ml range. Samples giving human Factor XI levels above 100 ng/ml should be diluted in Blocking Buffer before use. A 1:1,000 to 1:5,000 dilution for plasma is suggested for best results.
Reagent Preparation	1. 10x Wash Buffer: Dilute the 50 mL of concentrate to 1x with 450 mL of DI water prior to use. 2. TBS Buffer: 0.1 M Tris, 0.15 M NaCl, pH 7.4. 3. 3% BSA Blocking Buffer: 3% BSA in TBS Buffer. 4. Standard: Reconstitute with DI Water as directed on the vial to give a 1000 ng/mL Standard Stock Solution. Prepare immediately prior to use. 5. Primary Antibody: Reconstitute with 3% BSA Blocking Buffer as directed on the vial and vortex gently to mix. Prepare immediately prior to use.
Standard Preparation	Prepare the Standard Stock Solution as described above. Do not prepare the standards until you are ready to apply them to the plate.
Preparation and Storage	1. Store this kit and its components at 4 degree C until use. 2. The reconstituted Standard and Primary Antibody may be stored at -70 degree C for later use. DO NOT freeze/thaw the Standard or Primary Antibody more than once.

IMAGES



Application Data

Scheme I: Suggested Plate Layout

	1	2	3	4	5	6	7	8	9	10	11	12
A	S ₉	S ₈	S ₇	S ₆	S ₅	S ₄	S ₃	S ₂	S ₁	S ₀	U ₁	U ₂
B	S ₉	S ₈	S ₇	S ₆	S ₅	S ₄	S ₃	S ₂	S ₁	S ₀	U ₁	U ₂
C	U ₃	U ₄	U ₅	U ₆	U ₇	U ₈	U ₉	U ₁₀	U ₁₁	U ₁₂	U ₁₃	U ₁₄
D	U ₃	U ₄	U ₅	U ₆	U ₇	U ₈	U ₉	U ₁₀	U ₁₁	U ₁₂	U ₁₃	U ₁₄
E	U ₁₅	U ₁₆	U ₁₇	U ₁₈	U ₁₉	U ₂₀	U ₂₁	U ₂₂	U ₂₃	U ₂₄	U ₂₅	U ₂₆
F	U ₁₅	U ₁₆	U ₁₇	U ₁₈	U ₁₉	U ₂₀	U ₂₁	U ₂₂	U ₂₃	U ₂₄	U ₂₅	U ₂₆
G	U ₂₇	U ₂₈	U ₂₉	U ₃₀	U ₃₁	U ₃₂	U ₃₃	U ₃₄	U ₃₅	U ₃₆	U ₃₇	U ₃₈
H	U ₂₇	U ₂₈	U ₂₉	U ₃₀	U ₃₁	U ₃₂	U ₃₃	U ₃₄	U ₃₅	U ₃₆	U ₃₇	U ₃₈

Application Data

Standard	Factor XI Concentration (ng/mL)	Blocking Buffer (μL)	Transfer Volume (μL)	Transfer Source	Final Volume (μL)
S9	100	900	100	Stock Vial	500
S8	50	500	500	S9	600
S7	20	600	400	S8	500
S6	10	500	500	S7	500
S5	5	500	500	S6	600
S4	2	600	400	S5	500
S3	1	500	500	S4	500
S2	0.5	500	500	S3	600
S1	0.2	600	400	S2	1000
S0	0	500	---	---	500

Component	Contents	Quantity	Storage	Cat. No.
Coated Plate	Anti-human Factor XI coated 96-well plate	1 plate	4°C	CF46a
Standard	Lyophilized Human Factor XI standard	1 vial	4°C	CF46b
Wash Buffer	10x solution for washing plate	50 mL	4°C	CF46c
Primary Antibody	Lyophilized Anti-human Factor XI-HRP Conjugate	1 vial	4°C	CF46d
Substrate	TMB Substrate	10 mL	4°C	CF46e

Application Data

Application Data

ADDITIONAL INFORMATION

Related Product Information for Factor XI assay kit

Introduction: This assay is intended for the quantitative determination of total Factor XI antigen in human plasma. Factor XI is a disulfide linked two-chain glycoprotein zymogen and is the precursor of the coagulation enzyme Factor XIa1. Factor XI consists of two identical monomers and circulates in plasma in complex with kininogen 2. Factor XI is activated by Factor XIIa and converts Factor IX to Factor IXa during the intrinsic pathway of the coagulation cascade3.

Principle of assay: Human Factor XI will bind to the affinity purified capture antibody coated on the microtiter plate. Factor XI and XIa will react with the antibody on the plate. After appropriate washing steps, peroxidase labeled polyclonal anti-human Factor XI primary antibody binds to the captured protein. Excess antibody is washed away and TMB substrate is used for color development at 450nm. A standard calibration curve is prepared along with the samples to be measured using dilutions of human Factor XI. Color development is proportional to the concentration of Factor XI in the samples.

References

1. Kurachi, K, and Davie, E.W.; (1981) Methods in Enzymology: 80: 211-220
2. Thompson, R.E., et al.; (1977) J. Clin. Invest.: 60: 1376
3. Walsh, P.N.; (1993) Methods in Enzymology: 222:65-96
4. Bouma, B.N., et al.; (1983) Blood: 62:1123-1131

NCBI AND UNIPROT INFORMATION

NCBI GI #	14626469
Molecular Weight	2,076 Da
NCBI Official Full Name	factor XI, partial
UniProt Protein Name	Factor XI
UniProt Entry Name	Q96QS8_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/factor-xi/71796>