



## Goat anti Human Factor XI polyclonal antibody [HRP] (CABT-L454)

This product is for research use only and is not intended for diagnostic use.

### PRODUCT INFORMATION

<b>Specificity</b>	Prior to conjugation, this antibody was specific for FXI as demonstrated by immunoelectrophoresis and ELISA.
<b>Target</b>	Factor XI
<b>Immunogen</b>	Human Factor XI purified from plasma.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Goat
<b>Species Reactivity</b>	Human
<b>Conjugate</b>	HRP
<b>Applications</b>	IEP, ELISA
<b>Format</b>	Liquid
<b>Size</b>	200 µg
<b>Buffer</b>	A buffered stabilizer solution containing 50% (v/v) glycerol.
<b>Preservative</b>	None
<b>Storage</b>	Store between -10 and -20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use. Avoid exposure to sodium azide as this is an inhibitor of peroxidase activity.

# BACKGROUND

## Introduction

Factor XI (F.XI, plasma thromboplastin antecedent) is a coagulation protein produced in the liver that circulates in plasma at approximately 5 µg/mL (30 nM). The mass of F.XI is 160 kDa as determined by SDS-PAGE under non-reducing conditions and 80 kDa upon reduction. F.XI consists of two identical 80 kDa subunits linked by disulphide bonds. Each subunit consists of a tandem repeat of four apple domains followed by a serine protease catalytic domain. Cleavage of F.XI by activated factor XII or thrombin converts each subunit into a two-chain form and generates two active sites per F.XIa molecule. The mass of F.XIa is 160 kDa unreduced, but upon reduction F.XIa migrates as a heavy chain of 50 kDa and a light chain of 30 kDa. The catalytic site of F.XIa resides in the light chain. In plasma, F.XI or F.XIa circulates in non-covalent 1:1 complex with high molecular weight kininogen, which acts as a cofactor in the activation of F.XI by activated factor XII. The activity of F.XIa is regulated by platelets and by several proteinase inhibitors including, in order of decreasing importance, C1-inhibitor, α2 Antiplasmin, α1 Antitrypsin and antithrombin. Heparin has relatively little effect on the rate of inhibition of F.XIa by antithrombin. The only known natural substrate for activated F.XI (F.XIa) is factor IX (Christmas factor) and the only cofactor required for this reaction is ionized calcium.

## Keywords

F11;coagulation factor XI;FXI;PTA;plasma thromboplastin antecedent;

# GENE INFORMATION

## Entrez Gene ID

[2160](#)

## UniProt ID

[P03951](#)