

Anti-Human Factor X (Sheep)

Affinity-Purified IgG, 0.5 mg



Ref#: SAF10-AP
 Lot#: xxxxxx
 Exp. Date: xxxx-xx

Store at -10 to -20°C

For Research Use Only
 Not for Use in Diagnostic Procedures
 For *in vitro* Use Only

Immunogen:	Human Factor X (from human plasma)			
Format:	Affinity-purified IgG in 10 mM HEPES, pH 7.3, 150 mM NaCl, 50% (v/v) glycerol			
Host:	Sheep			
Storage:	Store between -10 and -20°C. Vial should be tightly capped. Do not store in frost-free freezers. Allow product to warm to room temperature and gently mix before use			
Total Protein:	0.50 mg			
Volume:	1 vial containing 0.250 mL anti-human, affinity purified IgG			
Concentration:	2 mg/mL affinity-purified IgG by absorbance; Extinction Coefficient $E^{1\%}_{280} = 13.4$			
Specificity:	Specificity demonstrated by immunoelectrophoresis and ELISA methods			
Neutralizing Activity:	Not Determined			
Application:	Suitable as a source of affinity purified, enriched antibodies			
Species Cross Reactivity:	Dog:	+	Human: ++	Mouse: +
	Pig:	+	Rabbit: -	Rat: -

Coagulation Factor X (FX, Stuart Factor) is a vitamin K-dependent glycoprotein produced in the liver. The concentration in plasma is ~10 µg/mL (~170 nM). FX is expressed as a two-chain molecule with a molecular weight of about 59 kDa. The light chain (17 kDa) contains a calcium-binding domain consisting of one hydroxy-aspartic acid and 11 γ-carboxyglutamic acid (gla) residues. These residues allow FX to bind to membranes that contain acidic phospholipids in a calcium dependent manner. This is followed by two EGF-like domains. The heavy chain (42 kDa) consists of the catalytic domain, carbohydrate and the activation peptide. Activation to the active enzyme (FXa) results from cleavage at residue Arg52 in the heavy chain by a complex of FIXa, cofactor VIIIa, calcium and negatively charged phospholipid surface, or by the FVIIa-tissue factor complex.