

Anti-Human Factor X (Rabbit) Peroxidase Conjugated IgG, 0.20 mg



Ref#: RAF10-HRP

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:	Peroxidase Conjugated IgG in a buffered stabilizer solution containing 50% (v/v) glycerol
Host:	Rabbit
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 Avoid exposure to Sodium azide as this is an inhibitor of peroxidase activity
Total Protein:	0.20 mg
Applications:	Suitable as a source of peroxidase-labeled antibodies. For Research Use Only. Not for Use in Diagnostic Procedures. For <i>in vitro</i> use only
Volume:	1 vial containing 0.100 mL IgG conjugated to horseradish peroxidase (HRP) through carbohydrate groups
Concentration:	2 mg/mL IgG by Absorbance; Extinction Coefficient $E^{1\%}_{280} = 14.0$
Specificity:	Specificity demonstrated by immunoelectrophoresis and ELISA methods
Reinheitszahl (A_{403}/A_{280}):	0.40

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.