For research use only

## *vision*

## Factor X, Human Plasma

**CATALOG #**: 7688-400 400 μg

**ALTERNATE NAMES:** Stuart factor, Stuart-Prower factor

SOURCE: Human Plasma. Purified from Human plasma that

was tested and found negative by FDA accepted methods for Anti-HIV1/2, Anti-HTLV I & II, HBsAg, Anti-HCV, Syphilis, HBC Ab, HIV-1 p24 Ag or HIV-1 RNA, HCV RNA and HBV RNA. Donors are screened for CJD (Creutzfeldt-Jakob Disease).

MOL. WEIGHT: 58.8 kDa

**PURITY:** ≥ 95% by SDS-PAGE; Shows no reduction upon

incubation with 2-mercaptoethanol.

**EXTINCTION COEFFICIENT (1%):** 11.6

FORM: Liquid

FORMULATION: In 20 mM Tris-HCl, 0.1 M NaCl, 1 mM Benzamidine

pH 7.4.

**ACTIVITY:** Lot dependent. Determined via clotting assay.

STORAGE CONDITIONS: Store at -60°C or lower. Avoid repeated freezing and

thawing cycles.

**DESCRIPTION**: Factor X is a vitamin K-dependent protein zymogen which is synthesized in the liver and circulates in plasma as a two chain molecule linked by a disulfide bond. Prior to secretion into plasma, post-translational modifications produce 11 gamma-carboxyglutamic acid (gla) residues and a single b-hydroxyaspartic acid residue, which are located within the NH2-terminal light chain. The light chain also contains two epidermal growth factor (EGF) homology domains. The COOH-terminal heavy chain of factor X contains most of the carbohydrate moieties, as well as the latent serine protease domain. The activation of factor X is catalyzed by either the intrinsic factor Xase complex (factor IXa, factor VIIIa, cellular surface and calcium ions) or the extrinsic factor Xase complex (factor VIIIa, tissue factor, cellular surface and calcium ions).

## **RELATED PRODUCTS:**

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- Factor Va, Human Plasma (Cat. No. 4098-10, 50)
- Factor VII, Human Plasma (Cat. No. 7686-100)
- Factor VIIa, Human Plasma (Cat. No. 7687-100)
- Factor Xa, Human Plasma (Cat. No. 7689-400)
- Factor XII, Human Plasma (Cat. No. 7690-250)
- Factor XIIa, Human Plasma (Cat. No. 7691-250)

FOR RESEARCH USE ONLY! Not to be used in humans.

