

## 32-18439: Human F10 Protein, His Tag

**Uniprot ID :** P00742

**Alternative Name :** FX; FXA

### Description

**Description :** Recombinant human F10 Protein with C-terminal 6 $\text{Å}$ —His tag

**Background :** This gene encodes the vitamin K-dependent coagulation factor X of the blood coagulation cascade. This factor undergoes multiple processing steps before its preproprotein is converted to a mature two-chain form by the excision of the tripeptide RKR. Two chains of the factor are held together by 1 or more disulfide bonds; the light chain contains 2 EGF-like domains, while the heavy chain contains the catalytic domain which is structurally homologous to those of the other hemostatic serine proteases. The mature factor is activated by the cleavage of the activation peptide by factor IXa (in the intrinsic pathway), or by factor VIIa (in the extrinsic pathway). The activated factor then converts prothrombin to thrombin in the presence of factor Va, Ca<sup>2+</sup>, and phospholipid during blood clotting. Mutations of this gene result in factor X deficiency, a hemorrhagic condition of variable severity. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing to generate mature polypeptides.

**Molecular Characterization:** mass of 52.2 kDa after removal of the signal peptide.

**Tag :** C-6 $\text{Å}$ —His tag

### Product Info

**Amount :** 50  $\mu\text{g}$  / 100  $\mu\text{g}$

**Purification :** The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

**Content :** Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization.

**Storage condition :** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

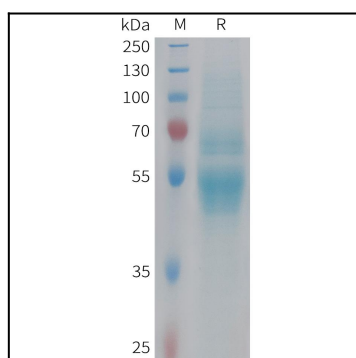


Figure 1. Human F10 Protein, His Tag on SDS-PAGE under reducing condition.