



Recombinant Protein Technical Manual

Recombinant Human Coagulation Factor X/F10 Protein (Fc Tag)

RPE3430

Product Data:

Product SKU: RPE3430

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P00742

Protein Information:

Molecular Mass: 78.2 kDa

AP Molecular Mass: 94 kDa

Tag: C-Fc

Bio-activity:

Purity: > 85% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM MES, 150mM NaCl, 0.2mM CaCl₂, pH 5.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Coagulation factor 10; coagulation factor X; FX; FXA

Immunogen Information:

Sequence: Asp22-Phe96

Background:

F10, also known as Coagulation factor X, belongs to the peptidase S1 family that is synthesized as a 488 amino acid (aa) with a signal peptide and a pro region (residues 1-40). Both the intrinsic and extrinsic pathways activate Factor X to Xa, which consists of light (residues 1-179) and heavy (residues 235-488) chains linked by a disulfide bond. Coagulation factor X is initially synthesized in the liver. The two chains are formed from a single-chain precursor by the excision of two Arg residues and are held together by 1 or more disulfide bonds. Forms a heterodimer with SERPINA5. F10 is a vitamin K-dependent glycoprotein that converts prothrombin to thrombin in the presence of factor Va, calcium and phospholipid during blood clotting.