

Recombinant Human F12 protein, His & T7-tagged

Cat. No. F12-773H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human F12 aa. (Ser400~Ser615 (Accession # P00748)) fused with N-terminal His & T7 tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Ser400~Ser615
Description	This gene encodes coagulation factor XII which circulates in blood as a zymogen. This single chain zymogen is converted to a two-chain serine protease with an heavy chain (alpha-factor XIIa) and a light chain. The heavy chain contains two fibronectin-type domains, two epidermal growth factor (EGF)-like domains, a kringle domain and a proline-rich domain, whereas the light chain contains only a catalytic domain. On activation, further cleavages takes place in the heavy chain, resulting in the production of beta-factor XIIa light chain and the alpha-factor XIIa light chain becomes beta-factor XIIa heavy chain. Prekallikrein is cleaved by factor XII to form kallikrein, which then cleaves factor XII first to alpha-factor XIIa and then to beta-factor XIIa. The active factor XIIa participates in the initiation of blood coagulation, fibrinolysis, and the generation of bradykinin and angiotensin. It activates coagulation factors VII and XI. Defects in this gene do not cause any clinical symptoms and the sole effect is that whole-blood clotting time is prolonged.
Form	Freeze-dried powder

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	Predicted Molecular Mass: 27.2kDa
Endotoxin	<1.0EU per 1g (determined by the LAL method)
Purity	>95%
Characteristic	The isoelectric point is 5.5.
Applications	SDS-PAGE; WB; ELISA; IP.
Stability	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
Storage buffer	Supplied as lyophilized form in PBS, pH7.4, containing 5% sucrose, 0.01% sarcosyl.
Reconstitution	Reconstitute in sterile PBS, pH7.2-pH7.4.

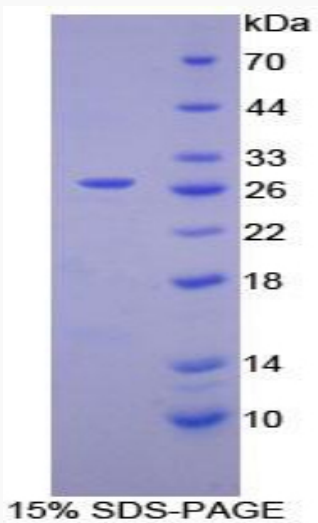
GENE INFORMATION

Gene Name	F12 coagulation factor XII [Homo sapiens (human)]
Official Symbol	F12
Synonyms	HAF; HAE3; HAEX; Hageman factor; beta-factor XIIa part 1; beta-factor XIIa part 2; coagulation factor XIIa heavy chain; coagulation factor XIIa light chain; coagulation factor XII

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	2161
mRNA Refseq	NM_000505.3
Protein Refseq	NP_000496.2
UniProt ID	P00748
SDS-PAGE	 15% SDS-PAGE