

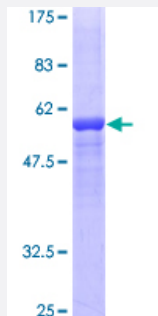
Full-Length

F12 (Human) Recombinant Protein (P01)

Catalog # H00002161-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human F12 full-length ORF (AAH12390, 1 a.a. - 300 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MPAQPAPPKPQPTTRTPPQSQTGALPAKREQPPSLTRNGPLSCGQRLRKSLSMTRVVGGGLV
ALRGAHPYIAALYWGHSFCAGSLIAPCWVLTAAHCLQDRPAPEDLTVVLGQERRNHSCEPCQTL
AVRSYRLHEAFSPVSYQHDLALLRLQEDADGSCALLSPYVQPVCLPSGAARPSETTLCQVAGW
GHQFEGAEYASFLQEAQVPFLSLERCSAPDVHGSSILPGMLCAGFLEGGTDACQGDSGGPLV
CEDQAAERRLTLQGIISWGS GCGDRNKPGVYTDVAYYLAWIREHTVS

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

58.74

Interspecies Antigen Sequence

Mouse (73); Rat (73)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — F12

Entrez GeneID[2161](#)**GeneBank Accession#**[BC012390](#)**Protein Accession#**[AAH12390](#)**Gene Name**

F12

Gene Alias

HAE3, HAEX, HAF

Gene Description

coagulation factor XII (Hageman factor)

Omim ID[234000](#) [610618](#) [610619](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

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. [provided by RefSeq]

Other Designations

Hageman factor|coagulation factor XII

Pathway

- [Complement and coagulation cascades](#)

Disease

- [Abortion](#)
- [Acute Disease](#)
- [Angina](#)
- [Atherosclerosis](#)
- [Blood Coagulation Disorders](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Cerebral Infarction](#)
- [Cerebrovascular Accident](#)
- [Chorioamnionitis](#)
- [Chromosome Deletion](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)
- [Disease Progression](#)
- [Edema](#)
- [Factor XII Deficiency](#)
- [Fetal Membranes](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)

- [Hemorrhagic Disorders](#)
- [Hypercholesterolemia](#)
- [Hypertension](#)
- [Intracranial Thrombosis](#)
- [Kidney Failure](#)
- [Myocardial Infarction](#)
- [Obstetric Labor](#)
- [Peripheral Vascular Diseases](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Protein S Deficiency](#)
- [Recurrence](#)
- [Retinal Vein Occlusion](#)
- [Syndrome](#)
- [Thrombophilia](#)
- [Thrombosis](#)
- [Venous Thrombosis](#)
- [Werner syndrome](#)