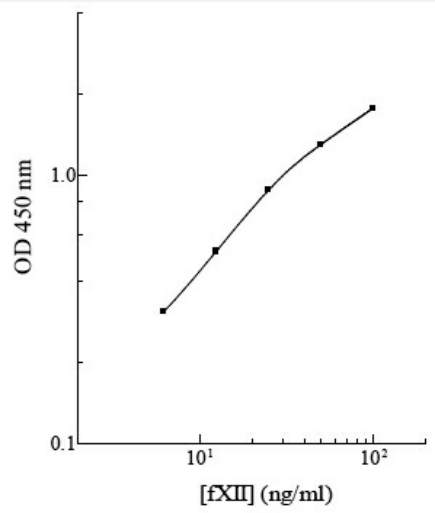
F12 (Human) ELISA Kit

Catalog # KA1037 Size 1 Kit

Applications



The standard curve is for the purpose of illustration only and should not be used to calculate unknowns. A standard curve should be generated each time the assay is performed.

Specification

Product Description	F12 (Human) ELISA Kit is a sandwich enzyme immunoassay for the quantitative measurement of human F12.
Suitable Sample	Cell Culture Supernatant, Milk, Plasma, Serum, Urine, CSF
Sample Volume	50 uL
Label	Peroxidase-conjugated
Detection Method	Colorimetric
Assay Type	Quantitative
Calibration Range	0.024 to 100 ng/mL
Reactivity	Human
Regulation Status	For research use only (RUO)
Storage Instruction	Store components of the kit at 4°C or -20°C as described in the protocol.

Copyright © 2023 Abnova Corporation. All Rights Reserved.

Applications

- Quantification

Gene Info — F12

Entrez GeneID	2161
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 chai n 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 i n the production of beta-factor XIIa light chain and the alpha-factor XIIa light chain becomes beta-f actor XIIa heavy chain. Prekallikrein is cleaved by factor XII to form kallikrein, which then cleaves f actor XII first to alpha-factor XIIa and then to beta-factor XIIa. The active factor XIIa participates in t he 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

Publication Reference

- Misfolded proteins activate factor XII in humans, leading to kallikrein formation without initiating coagulation.

  Maas C, Govers-Riemslag JW, Bouma B, Schiks B, Hazenberg BP, Lokhorst HM, Hammarstrom P, ten Cate H, de Groot PG, Bouma BN, Gebbink MF.

  The Journal of Clinical Investigation 2008 Sep; 118(9):3208.

  Application: Quant, Human, Plasma samples from patients with systemic amyloidosis

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- The elusive physiologic role of Factor XII.

  Schmaier AH.

  The Journal of Clinical Investigation 2008 Sep; 118(9):3006.

- Molecular mechanisms of thrombus formation in ischemic stroke: novel insights and targets for treatment.

  Stoll G, Kleinschnitz C, Nieswandt B.

  Blood 2008 Nov; 112(9):3555.

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

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- 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

Copyright © 2023 Abnova Corporation. All Rights Reserved.