

F12 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19282a

Product Information

Application	WB, E
Primary Accession	P00748
Other Accession	NP_000496.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39226
Calculated MW	67792
Antigen Region	9-38

Additional Information

Gene ID	2161
Other Names	Coagulation factor XII, Hageman factor, HAF, Coagulation factor XIIa heavy chain, Beta-factor XIIa part 1, Beta-factor XIIa part 2, Coagulation factor XIIa light chain, F12
Target/Specificity	This F12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9-38 amino acids from the N-terminal region of human F12.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	F12 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	F12
Function	Factor XII is a serum glycoprotein that participates in the initiation of blood coagulation, fibrinolysis, and the generation of bradykinin and angiotensin.

Prekallikrein is cleaved by factor XII to form kallikrein, which then cleaves factor XII first to alpha-factor XIIa and then trypsin cleaves it to beta-factor XIIa. Alpha-factor XIIa activates factor XI to factor XIa (PubMed:[2019570](#), PubMed:[21304106](#), PubMed:[8427954](#)).

Cellular Location Secreted.

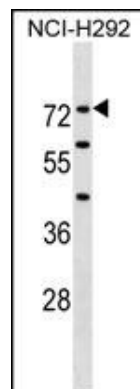
Background

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.

References

- Anton, A.I., et al. *Ann. Hematol.* 89(11):1147-1154(2010)
Corral, J., et al. *Blood Coagul. Fibrinolysis* 21(7):632-639(2010)
Romero, R., et al. *Am. J. Obstet. Gynecol.* 203 (4), 361 (2010) :
Bailey, S.D., et al. *Diabetes Care* 33(10):2250-2253(2010)
Romero, R., et al. *Am. J. Obstet. Gynecol.* 202 (5), 431 (2010) :

Images



F12 Antibody (N-term)(Cat. #AP19282a) western blot analysis in NCI-H292 cell line lysates (35ug/lane). This demonstrates the F12 antibody detected the F12 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.