



Cleaved-Factor XII HC (I20) Polyclonal Antibody

Catalog No	YP-Ab-03351
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	F12
Protein Name	Coagulation factor XII
Immunogen	The antiserum was produced against synthesized peptide derived from human FA12. AA range:1-50
Specificity	Cleaved-Factor XII HC (I20) Polyclonal Antibody detects endogenous levels of fragment of activated Factor XII HC protein resulting from cleavage adjacent to I20.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	F12; Coagulation factor XII; Hageman factor; HAF
Calculated Molecular Weight	68kD
Cell Pathway	Secreted.
Tissue Specificity	Blood,Lung,Plasma,
Function	catalytic activity:Selective cleavage of Arg-Ile bonds in factor VII to form factor VIIa and factor XI to form factor XIa.,disease:Defects in F12 are the cause of factor XII deficiency (FA12D) [MIM:234000]; also known as Hageman factor deficiency. This trait is an asymptomatic anomaly of in vitro blood coagulation. Its diagnosis is based on finding a low plasma activity of the factor in coagulating assays. It is usually only accidentally discovered through pre-operative blood tests. F12 deficiency is divided into two categories, a cross-reacting material (CRM)-negative group (negative F12 antigen detection) and a CRM-positive group (positive F12 antigen detection).,disease:Defects in F12 are the cause of hereditary angioedema type 3 (HAE3) [MIM:610618]; also known as estrogen-related HAE or hereditary angioneurotic edema with normal C1 inhibitor concentration and function. HAE is chara



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

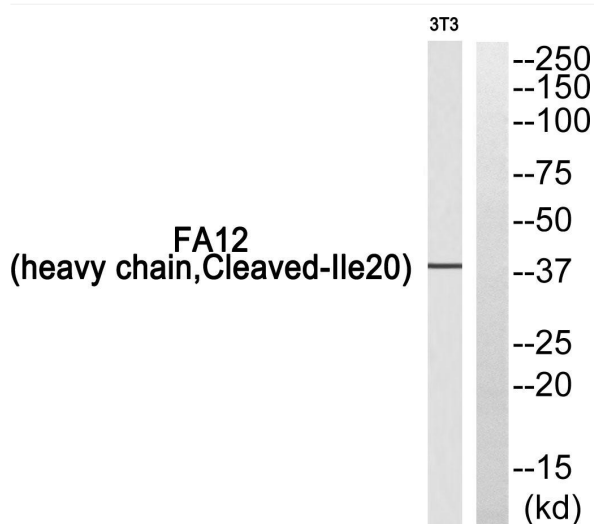
matters needing attention

Avoid repeated freezing and thawing!

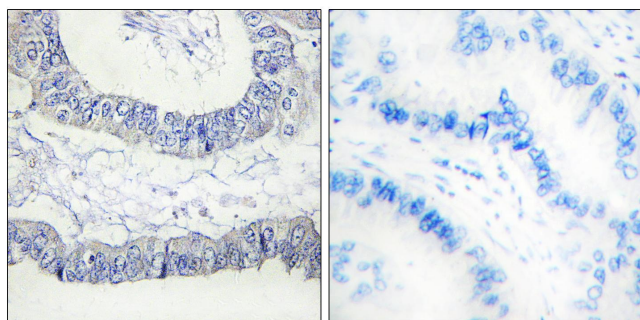
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of FA12 (heavy chain, Cleaved-Ile20) Antibody. The lane on the right is blocked with the FA12 (heavy chain, Cleaved-Ile20) peptide.



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using FA12 (heavy chain, Cleaved-Ile20) Antibody. The lane on the right is blocked with the FA12 (heavy chain, Cleaved-Ile20) peptide.