

## Cleaved-Factor XII HC (R372) Polyclonal Antibody

Catalog No: YC0085

**Reactivity:** Human; Rat; Mouse;

**Applications:** WB;ELISA

Target: F12

**Fields:** >>Complement and coagulation cascades

Gene Name: F12

Protein Name: Coagulation factor XII

Human Gene Id: 2161

**Human Swiss Prot** 

P00748

Q80YC5

No:

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

FA12. AA range:323-372

Specificity: Cleaved-Factor XII HC (R372) Polyclonal Antibody detects endogenous levels of

fragment of activated Factor XII HC protein resulting from cleavage adjacent to

R372.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 41kD

**Cell Pathway:** Complement and coagulation cascades;

**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 activat

Function: catalytic activity: Selective cleavage of Arg-|-lle 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

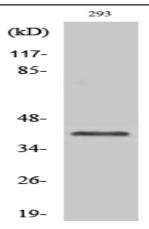
concentration and function. HAE is chara

Subcellular Location:

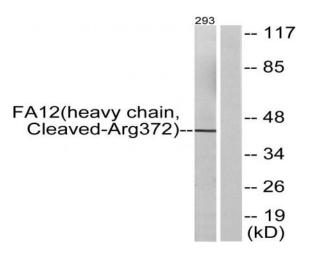
Secreted.

**Expression:** Blood, Lung, Plasma,

**Products Images** 



Western Blot analysis of various cells using Cleaved-Factor XII HC (R372) Polyclonal Antibody



Western blot analysis of lysates from 293 cells, treated with etoposide 25uM 1h, using FA12 (heavy chain,Cleaved-Arg372) Antibody. The lane on the right is blocked with the synthesized peptide.