

Recombinant Mouse Factor XII protein ab170085

1 Image

Description	
Product name	Recombinant Mouse Factor XII protein
Purity	> 95 % SDS-PAGE. ab170085 was purified by ion exchange chromatography.
Expression system	Insect cells
Accession	<u>Q80YC5</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Mouse
Sequence	MTALLFLGSLLMSLDLTLSAPPWKDSKKFKDAPDGPTVV LTVDGRLCHFP FQYHRQLHHKCIHKRRPGSRPWCATTPNFDEDQQWGYC LEPKKVKDHCSK HNPCHKGGTCINTPNGPHCLCPEHLTGKHCQKEKCFEPQ LLKFFHENELW FRTGPGGVARCECKGSEAHCKPVASQACSINPCLNGGS CLLVEDHPLCRC PTGYTGYFCDLDLWATCYEGRGLSYRGQAGTTQSGAPCQ RWTVEATYRNM TEKQALSWGLGHHAFCRNPNDTRPWCFFVWSGDRLSW DYCGLEQCQTPTF APLVVPESQEESPSQAPSLSHAPNDSTDHQTSLSKTNTM GCGQRFKGLS SFMRVVGGGLVALPGSHPYAALYWGNNFCAGSLIAPCWVL TAAHCLQNRP APEELTVVLGQDRHNQSCWCQTLAVRSYRLHEGFSSITY QHDLALLRLQ ESKTNSCAILSPHVQPVCLPSGAAPPSETVLCVAGWGH QFEGAEESTF LQEAQVPFIALDRCSNSNVHGDAILPGMLCAGFLEGGTDA CQGDSGGPLV CEEETAQHQLTLRGVISWGS CGDRNKP GVTYDVANYLA WIKHIAS
Predicted molecular weight	75 kDa

Specifications

Our **Abpromise guarantee** covers the use of **ab170085** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Liquid
Additional notes	Produced using non-baculovirus insect cells.

Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 5.30 Constituents: 0.03% Sodium acetate, 0.88% Sodium chloride
------------------------------	--

General Info

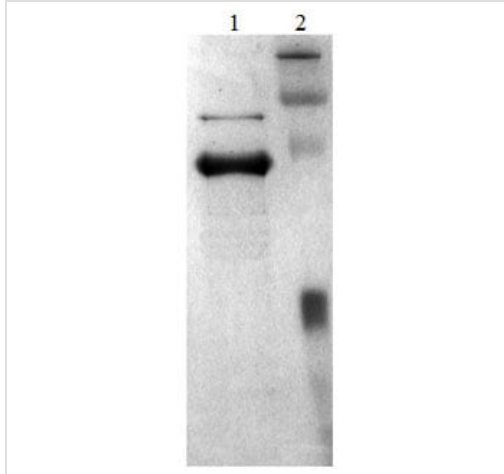
Function	Factor XII is a serum glycoprotein that participates in the initiation of blood coagulation, fibrinolysis, and the generation of bradykinin and angiotensin. Prekallikrein is cleaved by factor XII to form kallikrein, which then cleaves factor XII first to alpha-factor XIIa and then trypsin cleaves it to beta-factor XIIa. Alpha-factor XIIa activates factor XI to factor XIa.
Involvement in disease	<p>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).</p> <p>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 characterized by episodic local subcutaneous edema, and submucosal edema involving the upper respiratory and gastrointestinal tracts. HAE3 occurs exclusively in women and is precipitated or worsened by high estrogen levels (e.g., during pregnancy or treatment with oral contraceptives). It differs from HAE types 1 and 2 in that both concentration and function of C1 inhibitor are normal.</p>
Sequence similarities	<p>Belongs to the peptidase S1 family.</p> <p>Contains 2 EGF-like domains.</p> <p>Contains 1 fibronectin type-I domain.</p> <p>Contains 1 fibronectin type-II domain.</p> <p>Contains 1 kringle domain.</p> <p>Contains 1 peptidase S1 domain.</p>
Post-translational modifications	Factor XII is activated by kallikrein in alpha-factor XIIa, which is then further converted by trypsin into beta-factor XIIa. Alpha-factor XIIa is composed of the NH2-terminal heavy chain (Coagulation factor XIIa heavy chain) and the COOH-terminal light chain (Coagulation factor XIIa light chain), connected by a disulfide bond. Beta-factor XIIa is composed of 2 chains linked by a disulfide bond, a light chain (Beta-factor XIIa part 2), corresponding to the COOH-terminal light chain (Coagulation factor XIIa light chain) and a nonapeptide (Beta-factor XIIa part 1).

O- and N-glycosylated. The O-linked polysaccharides were not identified, but are probably the mucin type linked to GalNAc.

Cellular localization

Secreted.

Images



SDS-PAGE analysis of ab170085.

Lane 1: 3 µg ab170085 reduced

Lane 2: Molecular weight markers

SDS-PAGE - Recombinant Mouse Factor XII protein
(ab170085)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors