# abcam

### Product datasheet

# Native Human Factor XIIIa protein (Active) ab62412

## 1 Image

**Description** 

Product name Native Human Factor XIIIa protein (Active)

**Biological activity** This product has an activity range of 39 U/mg to 200 U/mg

**Purity** > 95 % Ion Exchange Chromatography.

Plasma FXIIIa was generated by cleavage of homogenous plasma FXIII by alpha-thrombin, in the

presence of EDTA. This product was then purified by ion and affinity chromatography.

Expression system Native

Protein length Full length protein

Animal free No Native

**Species** Human

#### **Specifications**

Our <u>Abpromise guarantee</u> covers the use of ab62412 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 Enzymatic FXIIIa is composed of A2'B2. Ab62412 is the active, enzymatic tetrameric form

(A2'B2) in absence of calcium ions. In contrast to the inactive tetrameric FXIII (A2B2), ab62412

has been activated by thrombin.

**Preparation and Storage** 

**Stability and Storage** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Constituents: 0.0146% EDTA, 50% Glycerol

This product is an active protein and may elicit a biological response in vivo, handle with caution.

**General Info** 

Function Factor XIII is activated by thrombin and calcium ion to a transglutaminase that catalyzes the

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formation of gamma-glutamyl-epsilon-lysine cross-links between fibrin chains, thus stabilizing the fibrin clot. Also cross-link alpha-2-plasmin inhibitor, or fibronectin, to the alpha chains of fibrin.

Involvement in disease

Defects in F13A1 are the cause of factor XIII subunit A deficiency (FA13AD) [MIM:613225].

FA13AD is an autosomal recessive disorder characterized by a life-long bleeding tendency, impaired wound healing and spontaneous abortion in affected women.

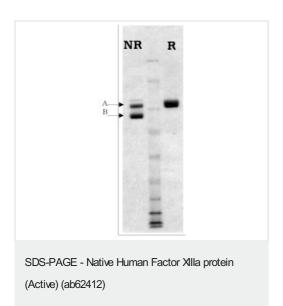
Sequence similarities

Belongs to the transglutaminase superfamily. Transglutaminase family.

The activation peptide is released by thrombin.

Cytoplasm. Secreted. Secreted into the blood plasma. Cytoplasmic in most tissues, but also secreted in the blood plasma.

#### **Images**



Lane 1: Non-reduced Factor XIIIa protein (ab62412) at 1 µg

Lane 2: Molecular weight standard

Lane 3 : Reduced Factor XIIIa protein (ab62412) at 1  $\mu$ g Notes: In the non-reduced sample the A chain shifts down toward the B chain following activation.

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

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