

# Product datasheet

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## ARG62487 anti-Factor XIIIa antibody

Package: 100 μl Store at: -20°C

### **Summary**

**Product Description** Rabbit Polyclonal antibody recognizes Factor XIIIa

**Tested Reactivity** Hu

**Tested Application** IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

**Target Name** Factor XIIIa

**Species** Human

Immunogen Recombinant protein corresponding to A-subunit of coagulation Factor XIII.

Conjugation Un-conjugated

**Alternate Names** Coagulation factor XIIIa; F13A; Protein-glutamine gamma-glutamyltransferase A chain; Coagulation

factor XIII A chain; Transglutaminase A chain; EC 2.3.2.13

## **Application Instructions**

Application table	Application	Dilution
	IHC-P	1:2000
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human recombinant Factor XIII A-subunit. Capillary hemangioma, dermatofibroma, and placenta.	

### **Properties**

Form Liquid

Purification **Purified Antibody** 

Buffer 1X PBS and 0.1% Sodium azide

Preservative 0.1% Sodium azide

Concentration 0.2 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

> and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GeneID: 2162 Human

Swiss-port # P00488 Human

Gene Symbol F13A1

Gene Full Name coagulation factor XIII, A1 polypeptide

Background This gene encodes the coagulation factor XIII A subunit. Coagulation factor XIII is the last zymogen to

become activated in the blood coagulation cascade. Plasma factor XIII is a heterotetramer composed of 2 A subunits and 2 B subunits. The A subunits have catalytic function, and the B subunits do not have enzymatic activity and may serve as plasma carrier molecules. Platelet factor XIII is comprised only of 2 A subunits, which are identical to those of plasma origin. Upon cleavage of the activation peptide by thrombin and in the presence of calcium ion, the plasma factor XIII dissociates its B subunits and yields the same active enzyme, factor XIIIa, as platelet factor XIII. This enzyme acts as a transglutaminase to catalyze the formation of gamma-glutamyl-epsilon-lysine crosslinking between fibrin molecules, thus stabilizing the fibrin clot. It also crosslinks alpha-2-plasmin inhibitor, or fibronectin, to the alpha chains of fibrin. Factor XIII deficiency is classified into two categories: type I deficiency, characterized by the lack of both the A and B subunits; and type II deficiency, characterized by the lack of the A subunit alone. These defects can result in a lifelong bleeding tendency, defective wound healing, and habitual

abortion. [provided by RefSeq, Jul 2008]

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

Research Area Cell Biology and Cellular Response antibody; Controls and Markers antibody

Calculated Mw 83 kDa

PTM The activation peptide is released by thrombin.