

# Rabbit Anti-factor XIII antibody

# SL1587R

Product Name:	factor XIII
Chinese Name:	凝血因子13抗体(纤维蛋白稳定因子)
Alias:	coagulation factor XIII; F13A1; TGase; FXIIIA; F13A; Coagulation factor XIII A chain; Coagulation factor XIIIa; Protein-glutamine gamma-glutamyltransferase A chain; Transglutaminase A chain; coagulation factor XIII, A1 polypeptide; coagulation factor XIII A chain-like.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-
	500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	76kDa
Cellular localization:	cytoplasmicSecretory protein
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human factor XIII:331-732/732
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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-glutamylepsilon-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.

#### 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.

#### Subunit:

Tetramer of two A chains and two B chains.

## **Subcellular Location:**

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

## Tissue Specificity:

The activation peptide is released by thrombin.

## 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.

# Similarity:

Belongs to the transglutaminase superfamily. Transglutaminase family.

### **SWISS:**

P00488

#### Gene ID:

2165

#### Database links:

Entrez Gene: 2165Human

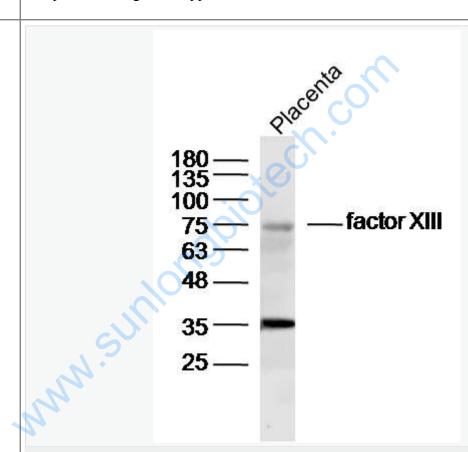
Omim: 134580Human

SwissProt: P05160Human

Unigene: 435782Human

# Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Sample:Placenta (mouse)cell Lysate at 40 ug

Primary: Anti-factor XIII (SL1587R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution

Predicted band size: 76 kD

Observed band size: 76 kD

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