SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-factor XIII antibody

Catalog Number: SL1587R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	factor XIII
Immunogen:	KLH conjugated synthetic peptide derived from human factor XIII: 331-732/732
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 Flow-Cyt=1ug/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Mouse(predicted:Rat,Dog,Pig,Cow,Rabbit)
Predicted MW.:	76kDa
Subcellular Location:	cytoplasmic Secretory protein
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

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

	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. **Database links:** **Entrez Gene:** 2165 Human Omim: 134580 Human **SwissProt:** P05160 Human **Unigene:** 435782 Human

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

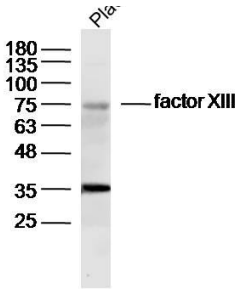
SunLong Biotech Co.,LTD

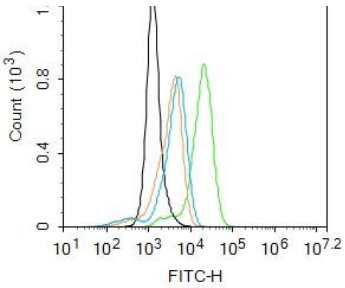
Tel: 0086-571-56623320 Fax:0086-571-56623318

E-mail:sales@sunlongbiotech.com

www.sunlongbiotech.com

[VALIDATION IMAGES]





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

Blank control:THP-1.
Primary Antibody (green line): Rabbit Anti-factor XIII antibody (SL1587R)
Dilution: 1µg /10^6 cells;
Isotype Control Antibody (orange line): Rabbit IgG .
Secondary Antibody : Goat anti-rabbit IgG-FITC
Dilution: 0.5µg /test.
Protocol
The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 0.1% PBST for 20 min at room temperature.The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

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