

# **Summary**

Production Name	Factor XIII B Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB,ELISA
Reactivity	Human,Rat,Mouse

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

### Immunogen

Gene Name	F13B
Alternative Names	F13B; Coagulation factor XIII B chain; Fibrin-stabilizing factor B subunit; Protein-
	glutamine gamma-glutamyltransferase B chain; Transglutaminase B chain
Gene ID	2165.0
SwissProt ID	P05160.The antiserum was produced against synthesized peptide derived from human
	F13B. AA range:61-110

# Application

Dilution Ratio	WB 1:500-2000 IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in
	other applications.
Molecular Weight	80kD



## Background

This gene encodes coagulation factor XIII B 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 a plasma carrier molecules. Platelet factor XIII is comprised only of 2 A subunits, which are identical to those of plasma origin. Upon activation by the 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. Factor XIII deficiency is classidisease:Defects in F13B can result in a lifelong bleeding tendency, defective wound healing, and habitual abortion., function: The B chain of factor XIII is not catalytically active, but is thought to stabilize the A subunits and regulate the rate of transglutaminase formation by thrombin., online information: Factor XIII entry, online information: The Singapore human mutation and polymorphism database, similarity: Contains 10 Sushi (CCP/SCR) domains., subunit: Tetramer of two A chains and two B chains.,

#### **Research Area**

Complement and coagulation cascades;

## **Image Data**



Immunofluorescence analysis of HUVEC cells, using F13B Antibody. The picture on the right is blocked with the synthesized peptide.





Immunohistochemistry analysis of paraffin-embedded human heart tissue, using F13B Antibody. The picture on the right is



Western Blot analysis of COLO cells using Factor XIII B Polyclonal Antibody diluted at 1: 1000

#### Note

For research use only.