

## Factor XIIIa (PT0258R) rabbit mAb

Catalog No: YM7117

**Reactivity:** Human; Mouse; (predicted: Rat)

**Applications:** IHC;WB; ELISA

Target: Factor XIIIa

**Fields:** >>Complement and coagulation cascades;>>Coronavirus disease - COVID-19

Gene Name: F13A1

Protein Name: Factor XIIIa

Human Gene Id: 2162

**Human Swiss Prot** 

No:

Immunogen: Synthesized peptide derived from human Factor XIIIa AA range:400-500

**Specificity:** This antibody detects endogenous levels of Factor XIIIa

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

**Source:** Monoclonal, Rabbit IgG1, Kappa

P00488

**Dilution:** IHC 1:100-500, WB 1:500-1000, ELISA 1:5000-20000

Purification: Recombinant Expression and Affinity purified

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 83kD

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

## **Function:**

catalytic activity:Protein glutamine + alkylamine = protein N(5)-alkylglutamine + NH(3).,cofactor:Binds 1 calcium ion per subunit.,disease:Defects in F13A1 are the cause of F13A deficiency [MIM:134570]. F13A deficiency is an autosomal recessive disorder characterized by a life-long bleeding tendency, impaired wound healing and spontaneous abortion in affected women. In addition to the common presentation such as subcutaneous and intramuscular haematomas, severe bleeding such as intracranial hemorrhages may occur.,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.,online information:Factor XIII entry,online information:The Singapore human

## Subcellular Location:

Cytoplasmic

**Expression:** 

Cytoplasmic

## **Products Images**