

Product name:	Cleaved-Factor XIIIa (G39) Rabbit Polyclonal Antibody
Cat number:	ABN08992
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human FA13A. AA range:20-69
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:10000-1:20000
Molecular Weight:	79kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 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 mutation and polymorphism database, polymorphism: There are four main allelic forms of this protein; F13A*1A, F13A*1B, F13A*2A and F13A*2B. In addition two other intermediate forms (F13A*(2)A and F13A*(2)B) seem to exist. The sequence shown is that of F13A*(2)B., PTM: The activation peptide is released by thrombin., similarity: Belongs to the transglutaminase superfamily. Transglutaminase family., subcellular location: Secreted into the blood plasma. Cytoplasmic in most tissues, but also secreted in the blood plasma., subunit: Tetramer of two A chains and two B chains.,