10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Factor XIIIa Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6735b

Specification

Factor XIIIa Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P00488

Factor XIIIa Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 2162

Other Names
Coagulation factor XIII A chain, Coagulation factor XIIIa, Protein-glutamine gamma-glutamyltransferase A chain, Transglutaminase A chain, F13A1, F13A

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6735b was selected from the C-term region of human Factor XIIIa. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Factor XIIIa Antibody (C-term) Blocking Peptide - Protein Information

Name F13A1

Synonyms F13A

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.

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

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Factor XIIIa Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

Factor XIIIa Antibody (C-term) Blocking Peptide - Images

Factor XIIIa Antibody (C-term) Blocking Peptide - Background

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 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.

Factor XIIIa Antibody (C-term) Blocking Peptide - References

Siegerink,B., Br. J. Haematol. 146 (4), 459-461 (2009)Nagy,B. Jr., Thromb. Haemost. 102 (1), 83-89 (2009)Board,P., Blood 80 (4), 937-941 (1992)