

Recombinant Human Coagulation Factor XIII B chain/F13B protein (His tag)

Catalog No. PKSH031106

Note: Centrifuge before opening to ensure complete recovery of vial contents.

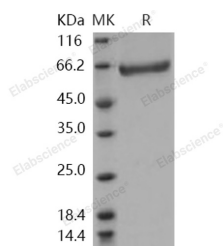
Description

Synonyms	Coagulation factor 13, Coagulation factor XIII, FXIIIB
Species	Human
Expression Host	HEK293 Cells
Sequence	Met1-Thr661
Accession	P05160
Calculated Molecular Weight	74.5 kDa
Observed molecular weight	80 kDa
Tag	C-His
Bioactivity	Testing in progress

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Coagulation factor XIII B chain, also known as Fibrin-stabilizing factor B subunit, Protein-glutamine gamma-glutamyltransferase B chain, Transglutaminase B chain and F13B, is a secreted protein which contains 10 Sushi (CCP /

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SCR) domains. 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 composed of just 2 A subunits, which are identical to those of plasma origin. 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. Factor XIII 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 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. Defects in F13B are the cause of factor XIII subunit B deficiency (FA13BD) which is an autosomal recessive disorder characterized by a life-long bleeding tendency, impaired wound healing and spontaneous abortion in affected women.