

32-7685: Recombinant Human Coagulation Factor XIII A Chain (C-6His)

Gene : F13A1
Gene ID : 2162
Uniprot ID : P00488

Description

Source: Human Cells.
MW :80.3kD.

Recombinant Human Coagulation Factor XIII A Chain is produced by our Mammalian expression system and the target gene encoding Gly39-Met732 is expressed with a 6His tag at the C-terminus. 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 composed of just 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. 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.

Product Info

Amount : 10 µg / 50 µg
Content : Supplied as a 0.2 µm filtered solution of 50 mM NaCl, 5% Sucrose, 1% Tween 20 (v/v), 0.3% Histidine (w/v), pH 8.0.
Storage condition : Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Amino Acid : GVN LQEF LNV TSV HLF KER WDT N KVD HHT DKY ENN KLV RRG QSF YVQ IDF SRPY D PRR DLF RVE YVIG RYP QE
NKG TYIP VPI VSEL QSG KWG AKIV MRED RSV RLS IQSS PKCIV GKFR MYVAV WTP YGVL RTSR NPET DTY ILFNP
WCED DAVY LDNE KERE EYVLNDIG VIFYGE VNDIK TRSW SYGQFED GILDTCL YVMDRA QMDLSGRGNPIKVS
RVGSAMVNAKDD EGV LVGSWDNIYAYGVPPSAWTGSVDILLEYRSEN PVRYGQCWVFAGVFNTFLRCLGIP
ARIVTNYFSAHDNDANLQMDIFLEEDGNVNSKLT KDSVWNYHCWNEAWMTRPDL PVGFGGWQAVDSTPQE
NSDGM YRCGPASVQA IKGHVCFQFDAPFVFAEVNSDLIYITAKKDGTHVVENVDATHIGKLIVTKQIGGDGM
MDITDTYKFQEGQEEERLALETALMYGAKKPLNTEGVMKSRSNVDMDFEVENAVLGKDFKLSITFRNNSHNRY
TITAYLSANITFYTGVPKAEFKKETFDVTLEPLSFKKEAVLIQAGEYMGQLLEQASLHFFVTARINETRDVLAKQKS
TVLTIPEIIIKVRGTQVVGSDMTVTVQFTNPLKETLRNVVHLDGPGVTRPMKKMFREIRPNSTVQWEEVCRPW
VSGHRKLIASMSSDSL RHVYGELDVQIQRRPSMVDHHHHH

Application Note

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.