

Product datasheet for TP306464

Factor XIIIa (F13A1) (NM_000129) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human coagulation factor XIII, A1 polypeptide (F13A1), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC206464 protein sequence Red =Cloning site Green =Tags(s)

MSETSRTAFGGRRVPPNNSNAEEDDLPTVELQGVVPRGVNLQEFNLVTSVHLFKERWDTNKVDHHTD
KY
ENNKLIVRRGQSFYVQIDFSRPYDPRRDLEFRVEYVIGRYPQENKGTYPVPIVSELQSGKWKAKIVMRED
RSVRLSIQSSPKCIVGKFRMYAVWTPYGLRTRSRNPETDTYILFNPWCEDDAVYLDNEKEREYVLNDI
GVIFYGEVNDIKTRSWSYGQFEDGILDTCLYVMDRAQMDLSGRGNPIKVS RVGSAMVNAKDDEGLVGS
W
DNIYAYGVPPSAWTGSVDILLEYSSENPVRYGQCWVFAGVFNTFLRCLGIPARIVTNYFSAHDNDANLQ
MDIFLEEDGNVNSKLTKDSVWNYHCWNEAWMTRPDLPGVFGGWQAVDSTPQENS DGMRYRCGPASVQ
AIKH
GHVCFQFDAPFVFAEVNSDLIYITAKKDGTHWENV DATHIGKLIVTKQIGGDGMM DITDTYKFQEGQEE
ERLALETALMYGAKKPLNTEGVMKSRSNVDMDFEVENAVLGKDFKLSITFRNNSHNRYTITAYLSANITF
YTGVPKAEFKKETFVDVLEPLSFKKEAVLIQAGEYMGQLLEQASLHFFVTARINETRDVLAKQKSTVLT
PEIIKVRGTQVVGSDMTVIVEFTNPLKETLRNVVHLDGPGVTRPMKMKMFREIRPNSTVQWEEVCRPWV
SGHRKLIASMSSDSL RHVYGELDVQIQRRPSM

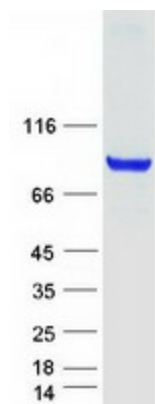
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	79.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.



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Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_000120
Locus ID:	2162
UniProt ID:	P00488
RefSeq Size:	3863
Cytogenetics:	6p25.1
RefSeq ORF:	2196
Synonyms:	F13A
Summary:	<p>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 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. [provided by RefSeq, Jul 2008]</p>
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Complement and coagulation cascades

Product images:

Coomassie blue staining of purified F13A1 protein (Cat# TP306464). The protein was produced from HEK293T cells transfected with F13A1 cDNA clone (Cat# [RC206464]) using MegaTran 2.0 (Cat# [TT210002]).