

# Recombinant Human F13A1 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. F13A1-1890H Lot. No. (See product label)

## SPECIFICATION

### Product Overview

F13A1 MS Standard C13 and N15-labeled recombinant protein (NP\_000120) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.

### Species

Human

### Source

HEK293

### Description

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.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Molecular Mass</b>	83.3 kDa
<b>AA Sequence</b>	<p>MSETSRTAFGGRRVPPNNSNAAEDDLPTVELQGVPVPRGVNLQEFLNVTSVHLFKE          RWDTNKVDHHTDKYENNKLIVRRGQSFYVQIDFSRPYDPRRD LFRVEYVIGRYPQE          NKGTYIPVPIVSELQSGKWGAKIVMREDRSVRLSIQSSPKCIVGKFRMYVAVWTPYG          VLRTSRNPETDTYILFNPWCEDDAVYLDNEKEREEYVLNDIGVIFYGEVNDIKTRSW          YGQFEDGILDTCLYVMDRAQMDLSGRGNPIKVS RVGSAMVNAKDDEGLVGSWDN          IYAYGVPPSAWTGSVDILLEYSSEN PVRYGQCWVFAGVFNTFLRCLGIPARIVTNY          FSAHDNDANLQMDIFLEEDGNVNSKLTKDSVWNYHCWNEAWMTRPDLPVGF GGW          QAVDSTPQENS DGM YRCGPASVQA IKHGHVCFQFDAPFVFAEVNSDLIYITAKKDG          THVVENVDATHIGKLIVTKQIGGDGMMDITDTYKFQEGQEEERLALETALMYGAKKP          LNTEGVMKSRSNVDMDFEVENAVLGKDFKLSITFRNNSHNRYTITAYLSANITFYTG          VKAEFKKETFDVTLEPLSFKKEAVLIQAGEYMGQLLEQASLHFFVTARINETRDVLAK          QKSTVLTIP EIIIKVRGTQVVGSDMTVIVEFTNPLKETLRNVVHLDGPGVTRPMKMM          FREIRPNSTVQWEEVCRPWVSGHRKLIASMSDSL RHVYGELDVQIQRRPSMTRTR          PLEQKLISEEDLAANDILDYKDDDDKV</p>
<b>Purity</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Stability</b>	Stable for 3 months from receipt of products under proper storage and handling conditions.
<b>Storage</b>	Store at -80 centigrade. Avoid repeated freeze-thaw cycles.
<b>Concentration</b>	50 µg/mL as determined by BCA
<b>Storage Buffer</b>	100 mM glycine, 25 mM Tris-HCl, pH 7.3.

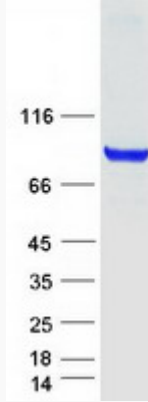
## GENE INFORMATION

<b>Gene Name</b>	F13A1 coagulation factor XIII A chain [ Homo sapiens (human) ]
------------------	--

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Official Symbol</b>	F13A1
<b>Synonyms</b>	F13A1; coagulation factor XIII, A1 polypeptide; F13A; coagulation factor XIII A chain; TGase; factor XIIIa; fibrinoligase; FSF, A subunit; coagulation factor XIIIa; transglutaminase A chain; transglutaminase. plasma; fibrin stabilizing factor, A subunit; coagulation factor XIII, A polypeptide; protein-glutamine gamma-glutamyltransferase A chain; bA525O21.1 (coagulation factor XIII, A1 polypeptide);
<b>Gene ID</b>	2162
<b>mRNA Refseq</b>	NM_000129
<b>Protein Refseq</b>	NP_000120
<b>MIM</b>	134570
<b>UniProt ID</b>	P00488
<b>SDS-PAGE</b>	

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA