

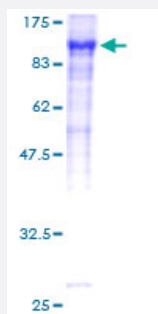
Full-Length

F13A1 (Human) Recombinant Protein (P01)

Catalog # H00002162-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human F13A1 full-length ORF (AAH27963, 1 a.a. - 732 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MSETSRTAFGGRRVPPNNSNAEDDLPTVELQGVVPRGVNLQEFLNATSVHLFKERWDTNKV
DHHTDKYENNKLMVRRGQSFYVQIDFSRPYDPRRDLFRVEYVIGRYPQENKGTYPVPIVSELQSGK
WGAKVMREDRSVRLSIQSSPKCIVGKFRMYAVWTPYGVLRTSRNPETDTYILFNPWCEDDAVY
LDNEKEREEYVLNDIGVIFYGEVNDIKTRWSYQGQFEDGILDTCLYVMDRAQMDLSGRGNPIKVS
VGSAMVNAKDDEGLVVGSDNYYAGVPPSAWTGSVDILLEYSSENVPVRYGQCWVFAGVFNT
FLRCLGIPARVTNYFSAHDNDANLQMDIFLEEDGNVNSKLTKDSVWNYHCWNEAWMTRPDLV
GFGGWQAVDSTPQENS DGMVRCGPASVQAIGHVCFQFDAPFVFAEVNSDLMTAKKDGHV
VENVDATHIGKLIVTKQIGGDGMMDITDTYKFQEGQEEERLALETALMYGAKKPLNTEGVMKSRN
VDMDFEVENAVLGKDFKLSITFRNNSHNRYTITAYLSANITFYTGVPKAEFKKETFDVTLEPLSFKK
EAVLIQAGEYMGQLEQASLHFFVTARINETRDVLAKQKSTVLTIPEIIKVRGTQVVGSDMTVIVEFT
NPLKETLRNVVWHLDGPGVTRPMKKMFREIRPNSTVQWEEVCRPWWSGHRKLIASMSSDSL RH
VYGELDVQIQRPSM

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

106.26

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — F13A1

Entrez GeneID	2162
GeneBank Accession#	BC027963
Protein Accession#	AAH27963
Gene Name	F13A1
Gene Alias	F13A
Gene Description	coagulation factor XIII, A1 polypeptide
Omim ID	134570
Gene Ontology	Hyperlink

Gene Summary

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]

Other Designations

FSF, A subunit[[TGase](#)][[bA525O21.1](#) (coagulation factor XIII, A1 polypeptide)]coagulation factor XIII A1 subunit[coagulation factor XIII, A polypeptide][[factor XIIIa](#)][[fibrin stabilizing factor, A subunit](#)][[fibrin oligase](#)][[protein-glutamine gamma-glutamyltransferase](#)]

Pathway

- [Complement and coagulation cascades](#)

Disease

- [Abortion](#)
- [Activated Protein C Resistance](#)
- [Acute Disease](#)
- [Alzheimer disease](#)
- [Anemia](#)
- [Aneurysm](#)
- [Angina Pectoris](#)
- [Antiphospholipid Syndrome](#)
- [Arterial Occlusive Diseases](#)
- [Arteriosclerosis](#)
- [Arthritis](#)
- [Atherosclerosis](#)

- [Atrial Fibrillation](#)
- [beta-Thalassemia](#)
- [Blood Coagulation Disorders](#)
- [Brain Ischemia](#)
- [Bronchopulmonary Dysplasia](#)
- [Cadaver](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Carotid Stenosis](#)
- [Celiac Disease](#)
- [Cerebral Hemorrhage](#)
- [Cerebral Infarction](#)
- [Cerebrovascular Accident](#)
- [Cerebrovascular Disorders](#)
- [Chorioamnionitis](#)
- [Choroidal Neovascularization](#)
- [Chronic Disease](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Coagulation Protein Disorders](#)
- [Cognition](#)
- [Colitis](#)
- [Conjunctival Diseases](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Coronary Thrombosis](#)

- [Critical Illness](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Ductus Arteriosus](#)
- [Edema](#)
- [Eye Hemorrhage](#)
- [Factor VII Deficiency](#)
- [Factor XIII Deficiency](#)
- [Fetal Death](#)
- [Fetal Growth Retardation](#)
- [Fetal Membranes](#)
- [Foramen Ovale](#)
- [Genetic Predisposition to Disease](#)
- [Heart Defects](#)
- [Heart Septal Defects](#)
- [Hemophilia A](#)
- [Hemorrhage](#)
- [Hemorrhagic Disorders](#)
- [Hyperlipidemias](#)
- [Hypertension](#)
- [Infant](#)
- [Infertility](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)

- [Intracranial Aneurysm](#)
- [Intracranial Embolism](#)
- [Intracranial Hemorrhages](#)
- [Ischemic Attack](#)
- [Kidney Failure](#)
- [Leukomalacia](#)
- [Macular Degeneration](#)
- [Metabolic Syndrome X](#)
- [Mouth Neoplasms](#)
- [Myocardial Infarction](#)
- [Myocardial Ischemia](#)
- [Myopia](#)
- [Neoplasms](#)
- [Neuropsychological Tests](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Peripheral Vascular Diseases](#)
- [Postoperative Complications](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Priapism](#)
- [Pulmonary Embolism](#)
- [Purpura](#)

- [Recurrence](#)
- [Sclerosis](#)
- [Sepsis](#)
- [Shock](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Thalassemia](#)
- [Thromboembolism](#)
- [Thrombophilia](#)
- [Thrombosis](#)
- [Tobacco Use Disorder](#)
- [Varicose Ulcer](#)
- [Vascular Diseases](#)
- [Venous Thrombosis](#)
- [Werner syndrome](#)