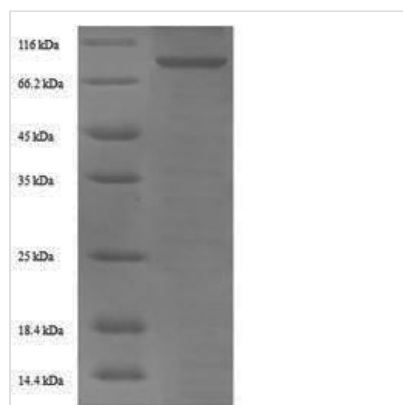




Recombinant Human Prothrombin (F2)

Product Code	CSB-EP007923HU
Relevance	Thrombin, which cleaves bonds after Arg and Lys, converts fibrinogen to fibrin and activates factors V, VII, VIII, XIII, and, in complex with thrombomodulin, protein C. Functions in blood homeostasis, inflammation and wound healing.
Abbreviation	Recombinant Human F2 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P00734
Alias	Coagulation factor II Cleaved into the following 4 chains: Activation peptide fragment 1 Activation peptide fragment 2 Thrombin light chain Thrombin heavy chain
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ANTFLEEVVRKGNLERECVEETCSYEEAFEALSSSTATDVFwakYTACETARTP RDKLAACLEGNAEGLGTNYRGHVNITRSGIECQLWRSRYPHKPEINSTTHPG ADLQENFCRNPDSSTTGPWCYTDDPTVRRQECsIPVCGQDQVTVAMTPRSE GSSVNLSPPLEQCVPDRGQQYQGR LAVTTHGLPCLAWASAAKALSKHQDF NSAVQLVENFCRNPDGDEEGVWCYVAGKPGDFGYCDLNYCEEAVEEETGDG LDEDSdraIEGRTATSEYQTFFNPRTFGSGEADcGLRPLFEKKSLEDKTEREL LESYIDGRIVEGSDAEIGMSPWQVMLFRKSPQELLCGASLIDRWVLTAAHCLL YPPWDKNFTENDLLVRIGKHSRTRYERNIEKISMLEKIYIHPRYNWRENLDRIA LMKLKKPVAfSDYIHPVCLPDRETAASLLQAGYKGRVTGWGNLKETWTANVG KGQPSVLQVVNLPIVERPVCKDSTRITDNMFCAGYKPDEGKRGDACEGDS GGPFVMKSPFNrwyQMGIvSWGEGCDRDGKYGFYTHvFRLKKWIKVIDQ FGE
Research Area	Cardiovascular
Source	E.coli
Target Names	F2
Expression Region	44-622aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	81.3kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The gene encoding the Human Prothrombin protein (44-622aa) creates recombinant plasmid, which is then transformed into e.coli cells. e.coli cells that can endure a specific antibiotic are selected and cultured under conditions that encourage the expression of the gene of interest. The protein features a N-terminal 6xHis-SUMO tag fusion. Following expression, affinity purification is employed to isolate and purify the recombinant Human Prothrombin protein from the cell lysate. Denaturing SDS-PAGE is applied to resolve the resulting recombinant Human Prothrombin protein, indicating a purity level exceeding 90%.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.