

Recombinant Human F2 Protein

Cat. No. F2-789H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant human F2 protein without tag was expressed in HEK293.

Species Human

Source HEK293

ProteinLength 622

Description

This gene encodes the prothrombin protein (also known as coagulation factor II). This protein is proteolytically cleaved in multiple steps to form the activated serine protease thrombin. The activated thrombin enzyme plays an important role in thrombosis and hemostasis by converting fibrinogen to fibrin during blood clot formation, by stimulating platelet aggregation, and by activating additional coagulation factors. Thrombin also plays a role in cell proliferation, tissue repair, and angiogenesis as well as maintaining vascular integrity during development and postnatal life. Peptides derived from the C-terminus of this protein have antimicrobial activity against *E. coli* and *P. aeruginosa*. Mutations in this gene lead to various forms of thrombosis and dysprothrombinemia. Rapid increases in cytokine levels following coronavirus infections can dysregulate the coagulation cascade and produce thrombosis, compromised blood supply, and organ failure.

Form Lyophilized

Molecular Mass 69.5 kDa

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

AA Sequence	<p>MAHVRGLQLPGCLALAALCSLVHSQHVFAPQQARSLLQVRRRANTFLEEVRKGNL ERECVEETCSYEEAFEALESSTATDVFWAKYTACETARTPRDKLAACLEGNCAEGL GTNYRGHVNITRSGIECQLWRSRYPHKPEINSTTHPGADLQENFCRNPDSSTTGPW CYTTDPTVRRQECSIPVCGQDQVTVAMTPRSEGSSVNLSPPLEQCVPDRGQQYQG RLAVTTHGLPCLAWASAQAKALSKHQDFNSAVQLVENFCRNPDGDEEGVWCYVAG KPGDFGYCDLNYCEEAVEEETGDGLDESDRAIEGRTATSEYQTTFFNPRTFGSGEA DCGLRPLFEKKSLEDKTERELLESYIDGRIVEGSDAEIGMSPWQVMLFRKSPQELLC GASLISDRWVLTAAHCLLYPPWDKNFTENDLLVRIGKHSRTRYERNIEKISMLEKIYIH PRYNWRENLDRIALMKLKKPVAFSDYIHPVCLPDRETAASLLQAGYKGRVTGWGN LKETWTANVGKQPSVLQVVNLPIVERPVCKDSTRIRITDNMFCAGYKPDEGKRGD ACEGDSGGPFVMKSPFNRRWYQMGIVSWGEGCDRDGKYGFYTHVFRLLKWKVIQVI DQFGE</p>
Purity	> 98%
Applications	WB; ELISA; FACS; FC
Stability	This bioreagent is stable at 4 centigrade (short-term) and -70 centigrade(long-term). After reconstitution, sample may be stored at 4 centigrade for 2-7 days and below -18 centigrade for future use.
Storage	At -20 centigrade.
Concentration	1 mg/mL
Storage Buffer	PBS (pH 7.4-7.5). Sterile-filtered colorless solution.
Reconstitution	Reconstitute in sterile distilled H ₂ O to no less than 100 µg/mL; dilute reconstituted stock further in other aqueous solutions if needed. Please review COA for lot-specific instructions. Final measurements should be determined by the end-user for optimal

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

performance.

GENE INFORMATION

Gene Name	F2 coagulation factor II (thrombin) [Homo sapiens (human)]
Official Symbol	F2
Synonyms	F2; coagulation factor II (thrombin); prothrombin; serine protease; prothrombin B-chain; PT; THPH1;
Gene ID	2147
mRNA Refseq	NM_000506
Protein Refseq	NP_000497
MIM	176930
UniProt ID	P00734

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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