

# Recombinant Human F2 Protein, MYC/DDK-tagged, C13 and N15-labeled

Cat. No. F2-069H Lot. No. (See product label)

## SPECIFICATION

### Product Overview

F2 MS Standard C13 and N15-labeled recombinant protein (NP\_000497) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.

### Species

Human

### Source

HEK293

### 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.

### Molecular Mass

70 kDa

### AA Sequence

MAHVRGLQLPGCLALAALCSLVHSQHVFLAPQQARSLLRVRRANTFLEEVRKGNL

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ERECVEETCSYEEAFEALESSTATDVFWAKYTACETARTPRDKLAACLEGNCAEGL  
 GTNYRGHVNITRSGIECQLWRSRYPHKPEINSTTHPGADLQENFCRNPDSSTTGPW  
 CYTTDPTVRRQECSIPVCGQDQVTVAMTPRSEGSSVNLSPPLEQCVPDRGQQYQG  
 RLAVTTHGLPCLAWASAQAKALSKHQDFNSAVQLVENFCRNPDGDEEGAWCYVAG  
 KPGDFGYCDLNYCEEAVEEETGDGLDESDRAIEGRTATSEYQTTFFNPRTFGSGEA  
 DCGLRPLFEKKSLEDKTERELLESYIDGRIVEGSDAEIGMSPWQVMLFRKSPQELLC  
 GASLISDRWVLTAAHCLLYPPWDKNFTENDLLVRIGKHSRTRYERNIEKISMLEKIYIH  
 PRYNWRENLDRIALMKLKPPVAFSDYIHPVCLPDRETAASLLQAGYKGRVTGWGN  
 LKETWTANVGKGQPSVLQVVNLPIVERPVCKDSTRIRITDNMFCAGYKPDEGKRGD  
 ACEGDSGGPFVMKSPFNRRWYQMGIVSWGEGCDRDGKYGFYTHVFRLLKWKVIQKVI  
 DQFGETRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Purity** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Stability** Stable for 3 months from receipt of products under proper storage and handling conditions.

**Storage** Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

**Concentration** 50 µg/mL as determined by BCA

**Storage Buffer** 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

## GENE INFORMATION

**Gene Name** F2 coagulation factor II, thrombin [ Homo sapiens (human) ]

**Official Symbol** F2

**Synonyms** F2; coagulation factor II, thrombin; PT; RPRGL2; THPH1; prothrombin; prepro-coagulation factor II; prothrombin B-chain; thrombin factor II; EC 3.4.21.5

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**Gene ID** 2147

**mRNA Refseq** NM\_000506

**Protein Refseq** NP\_000497

**MIM** 176930

**UniProt ID** P00734

**SDS-PAGE**



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