

# Active Recombinant Full Length Human F2 Protein, C-Flag-tagged

Cat. No. F2-490HFL Lot. No. (See product label)

## SPECIFICATION

### Product Overview

Recombinant Full Length Human F2 Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.

### Species

Human

### Source

Mammalian Cells

### 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


25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.

### Bio-activity

MS digestion standard

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<b>Molecular Mass</b>	67.5 kDa
<b>AA Sequence</b>	<p>MAHVRGLQLPGCLALAALCSLVHSQHVFLAPQQARSLLRVRRANTFLEEVRKGNL          ERECVEETCSYEEA FEALESSTATDVFWAKYTACETARTPRDKLAACLEGNCAEGL          GTNYRGHVNITRSGIECQLWRSRYPHKP EINSTTHPGADLQENFCRNPDSSTTGP          WCYTTDPTVRRQECESIPVCGQDQVTVAMTPRSEGSSVNLSPPL EQCVPDRGQQY          QGRLAVTTHGLPCLAWASQAQAKALSKHQDFNSAVQLVENFCRNPDGDEEGAWCY          VAGKP GDFGYCDLNYCEEAVEEETGDGLDESDRAIEGRTATSEYQTFNPRFTG          SGEADCGLRPLFEKKSLEDK TERELLESYIDGRIVEGSDAEIGMSPWQVMLFRKSP          QELLCGASLISDRWVLTAAHCLLYPPWDKNFTEN DLLVRIGKHSRTRYERNIEKISM          LEKIYHPRYNWRENLRDIALMKLKKPVAFSDYIHPVCLPDRETA SLLQAGYKGR          VTGWGNLKETWTANVGKQPSVLQVVNLPIVERPVCKDSTRIRITDNMFCAGYKPD          EGKR          GDACEGDSGGPFVMKSPFNRRWYQMGIVSWGEGCDRDGKYGFYTHVFRLKKWIK          KVIDQFGETRTRPLEQKLISEEDLAANDILDYKDDDDKV</p>
<b>Purity</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining.
<b>Stability</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>Storage</b>	Store at -80 centigrade.
<b>Concentration</b>	>50 ug/mL as determined by microplate BCA method.
<b>Preparation</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Protein Families</b>	Druggable Genome, Protease, Secreted Protein

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<b>Protein Pathways</b>	Complement and coagulation cascades, Neuroactive ligand-receptor interaction, Regulation of actin cytoskeleton
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<b>Full Length</b>	Full L.
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## GENE INFORMATION

<b>Gene Name</b>	F2 coagulation factor II, thrombin [ Homo sapiens (human) ]
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<b>Official Symbol</b>	F2
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<b>Synonyms</b>	PT; THPH1; RPRGL2
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<b>Gene ID</b>	2147
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<b>mRNA Refseq</b>	NM_000506.5
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<b>Protein Refseq</b>	NP_000497.1
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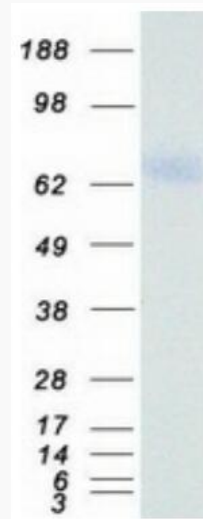
<b>MIM</b>	176930
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<b>UniProt ID</b>	P00734
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Coomassie blue staining of purified F2 protein.

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