

## Recombinant Human F2 Protein, His-tagged

Cat. No. F2-12619H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human F2 Protein(NP\_000497.1)(Ala44~Arg198) is expressed from E. coli with a His tag at the N-terminal.

**Species** Human

**Source** E.coli

**ProteinLength** Ala44~Arg198

**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** Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.

**Molecular Mass** The predicted molecular mass is 20.9kDa.

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<b>AA Sequence</b>	MGSSHHHHHSSGLVPRGSHMASMTGGQQMGRGSANTFLEEVRKGNLERECVE ETCSYEEAFEALESSTATDVFwakYTACETARTPRDKLAACLEGNCAEGLGTNYRG HVNITRSGIECQLWRSRYPHKPEINSTTHPGADLQENFCRNPDSSTTGPWCYTDDP TVRRQECSIPVCGQDQVTVAMTPR
<b>Endotoxin</b>	<1.0EU per 1g (determined by the LAL method)
<b>Purity</b>	> 95%
<b>Applications</b>	Positive Control; Immunogen; SDS-PAGE; WB. If bio-activity of the protein is needed, please check active protein.
<b>Stability</b>	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
<b>Reconstitution</b>	Reconstitute in sterile PBS, pH7.2-pH7.4.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	F2
<b>Official Symbol</b>	F2
<b>Synonyms</b>	FII; TM; PT; Thrombin; Prothrombin; Pro-Thrombin; Activation peptide fragment 1; Activation peptide fragment 2

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Gene ID 2147

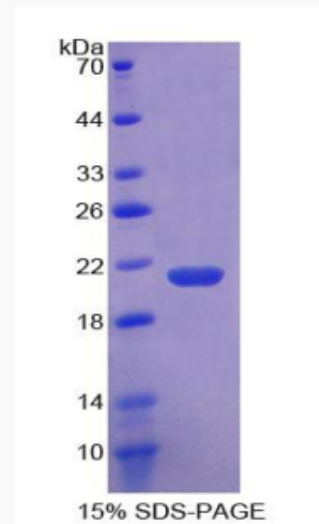
mRNA Refseq NM\_000506.5

Protein Refseq NP\_000497.1

MIM 176930

UniProt ID P00734

SDS-PAGE of F2-12619H



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