

Product datasheet for **AR51483PU-S**

Prothrombin (F2) (328-622, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Prothrombin (F2) (328-622, His-tag) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MTFGSGEADC GLRPLFEKKS LEDKTERELL ESYIDGRIVE GSDAEIGMSP WQVMLFRKSP QELLCGASLI SDRWVLTA AH CLLYPPWDKN FTENDLLVRI GKHSRTRYER NIEKISMLEK IYIHPRYNWR ENLDRDIALM KLKPPVAFSD YIHPVCLPDR ETAASLLQAG YKGRVTGWGN LKETWTANVG KGQPSVLQVW NLPIVERPVC KDSTRIRITD NMFCA GYKPD EGKRGDACEG DSGGPFVMKS PFNNRWYQMG IVSWGEGCDR DGKYGFYTHV FRLKKWIKV IDQFGE
Tag:	His-tag
Predicted MW:	33.9 kDa
Concentration:	lot specific
Purity:	>80% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol.
Preparation:	Liquid purified protein
Protein Description:	Recombinant human F2 protein was expressed in E.coli.
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_000497
Locus ID:	2147
UniProt ID:	P00734
Cytogenetics:	11p11.2
Synonyms:	PT; RPRGL2; THPH1



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Summary:

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. [provided by RefSeq, May 2020]

Protein Families:

Druggable Genome, Protease, Secreted Protein

Protein Pathways:

Complement and coagulation cascades, Neuroactive ligand-receptor interaction, Regulation of actin cytoskeleton

Product images: