

Product datasheet for **TP308589SE**

Prothrombin (F2) (NM_000506) Human Recombinant Protein

Product data:

| | |
|---------------------------------------|--|
| Product Type: | Recombinant Proteins |
| Description: | Purified recombinant protein of Human coagulation factor II (thrombin) (F2), secretory expressed in HEK293T cells, 20ug |
| Species: | Human |
| Expression Host: | HEK293T |
| Expression cDNA Clone or AA Sequence: | >RC208589 protein sequence Red =Cloning site Green =Tags(s) |
| | <p>MAHVRGLQLPGCLALAALCSLVHSQHVFLLAPQQARSLLQVRRANTFLEEVKGNLERECVEETCSYEEA FEALESSTATDVFWAKYTACETARTPRDKLAACLEGNAEGLGTNYRGHVNITRSGIECQLWRSRYPHKP EINSTTHPGADLQENFCRNPDSSTTGPWCYTDDPTVRRQECVIPVCGQDQVTAMTPRSEGSSVNLSPPL EQCVPRDGGQYQGRLLVTHGLPCLAWASAKALSKHQDFNSAVQLVENFCRNPDGDEEGAWCYVA GKP</p> <p>GDFGYCDLNYCEEAVEEETGDGLDESDRAIEGRTATSEYQTFNPRFTGSGEADCGLRPLFEKKSLEDK TERELLESYIDGRIVEGSDAEIGMSPWQVMLFRKSPQELLCGASLISDRWVLTAACHLLYPPWDKNFTEN DLLVRIGKHSRTRYERNIEKISMLEKIYIHPRYNWRENLDRIALMKLKKPVAFSDYIHPVCLPDRETA ALLQAGYKGRVTGWGNLKETWTANVGKGQPSVLQVNLPIVERPVCKDSTRITDNMFCAGYKPDEGKR GDACEGDSGGPFVMKSPFNRRWYQMGIVSWGEGCDRDGKYGFYTHVFLKKWIKVIDQFGE</p> <p>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</p> |
| Tag: | C-Myc/DDK |
| Predicted MW: | 71.2 kDa |
| Concentration: | >50 ug/mL as determined by microplate Bradford method |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| Buffer: | 25mM Tris-HCl, pH7.3, 100mM glycine, 10% glycerol |
| Note: | For culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| Storage: | Store at -80°C after receiving vials. |
| Stability: | Stable for at least 1 year from receipt of products under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |



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RefSeq: [NP_000497](#)

Locus ID: 2147

UniProt ID: [P00734](#)

RefSeq Size: 2018

Cytogenetics: 11p11.2

RefSeq ORF: 1866

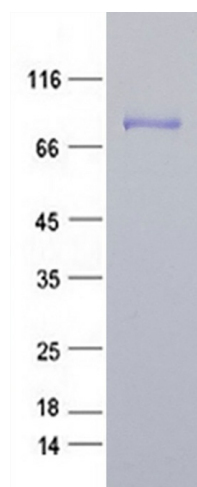
Synonyms: PT; RPRGL2; THPH1

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:



Coomassie blue staining of purified F2 protein (Cat #TP308589SE). The protein was produced from mammalian cells transfected with F2 cDNA clone (Cat #[RC208589]).