

Product datasheet for PH308589

Prothrombin (F2) (NM_000506) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	F2 MS Standard C13 and N15-labeled recombinant protein (NP_000497)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC208589
Predicted MW:	70 kDa
Protein Sequence:	>RC208589 protein sequence Red =Cloning site Green =Tags(s)

MAHVRGLQLPGCLALAALCSLVHSQHVFLAPQQARSLLQVRANTFLEEVRKGNLERECVEETCSYEEA
 FEALSSSTATDVFWAKYTACETARTPRDKLAACLEGNAEGLGTNYRGHVNITRSGIECQLWRSRYPHKP
 EINSTTHPGADLQENFCRNPDSSTTGWCYTDDPTVRRQECIPVCGQDQVTAMTPRSEGSSVNLSPPL
 EQCVPDRGQQYQGR LAVTTHGLPCLAWASAKALSKHQDFNSAVQLVENFCRNPDGDEEGAWCYVAGKP
 GDFGYCDLNYCEEAVEEETGDGLDESDRAIEGRTATSEYQTFNPRFTFGSGEADCLRLPEFKSLEDK
 TERELLESYIDGRIVEGSDAEIGMSPWQVMLFRKSPQELLCGASLISDRWVLTAAHCLLYPPWDKNFTEN
 DLLVRIGKHSRTRYERNIEKISMLEKIYIHPRYNWRENDRDIALMKLKKPVAFSDYIHPVCLPDRETA
 ALLQAGYKGRVTGWGNLKETWTANVGKGQPSVLQVVNLPIVERPVCKDSTRITDNMFCAGYKPDGKR
 GDACEGDSGGPFVMKSPFNRRWYQMGIVSWGEGCDRDGKYGFYTHVFLKKWIKVIDQFGE

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000497
RefSeq Size:	2018
RefSeq ORF:	1866


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Synonyms: PT; RPRGL2; THPH1

Locus ID: 2147

UniProt ID: [P00734](#)

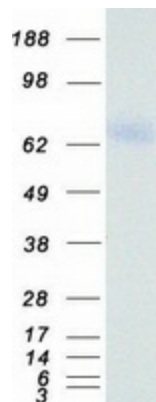
Cytogenetics: 11p11.2

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# [TP308589]). The protein was produced from HEK293T cells transfected with F2 cDNA clone (Cat# [RC208589]) using MegaTran 2.0 (Cat# [TT210002]).