

Product datasheet for **RC208589L3V**

Prothrombin (F2) (NM_000506) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Prothrombin (F2) (NM_000506) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Prothrombin
Synonyms:	PT; RPRGL2; THPH1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_000506
ORF Size:	1866 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC208589).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_000506.2
RefSeq Size:	2018 bp
RefSeq ORF:	1869 bp
Locus ID:	2147
UniProt ID:	P00734
Cytogenetics:	11p11.2
Domains:	KR, GLA, Tryp_SPc
Protein Families:	Druggable Genome, Protease, Secreted Protein



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Protein Pathways:	Complement and coagulation cascades, Neuroactive ligand-receptor interaction, Regulation of actin cytoskeleton
MW:	70 kDa
Gene Summary:	<p>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 <i>E. coli</i> and <i>P. aeruginosa</i>. 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]</p>