

Product datasheet for RC208589L1V

OriGene Technologies, Inc.

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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

PT: RPRGL2: THPH1 Synonyms:

Mammalian Cell

Selection:

ACCN:

None

Vector: pLenti-C-Myc-DDK (PS100064)

Myc-DDK Tag: NM 000506

ORF Size: 1866 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC208589).

Sequence:

The molecular sequence of this clone aligns with the gene accession number as a point of OTI Disclaimer: 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: 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]