

Product datasheet for RC208589L2

OriGene Technologies, Inc.

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Prothrombin (F2) (NM_000506) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Prothrombin (F2) (NM_000506) Human Tagged Lenti ORF Clone

Tag: mGFF

Symbol: Prothrombin

Synonyms: PT; RPRGL2; THPH1

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

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

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_000506

ORF Size: 1866 bp



Prothrombin (F2) (NM_000506) Human Tagged Lenti ORF Clone - RC208589L2

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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 000506.2</u>

 RefSeq Size:
 2018 bp

 RefSeq ORF:
 1869 bp

 Locus ID:
 2147

 UniProt ID:
 P00734

Cytogenetics:

Domains: KR, GLA, Tryp SPc

Protein Families: Druggable Genome, Protease, Secreted Protein

11p11.2

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

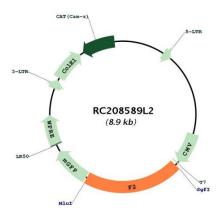
is proteolytically cleaved in multiple steps to form the activated serine protease thrombin. The activated thrombin enzyme plays an important role in thrombosis and hemostasis by

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]



Product images:



Circular map for RC208589L2