

Product datasheet for RC208506L2

OriGene Technologies, Inc.

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Factor X (F10) (NM_000504) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Factor X (F10) (NM_000504) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Factor X

Synonyms: FX; FXA

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(RC208506).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_000504

ORF Size: 1464 bp



Factor X (F10) (NM_000504) Human Tagged Lenti ORF Clone - RC208506L2

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 000504.3</u>

 RefSeq Size:
 1560 bp

 RefSeq ORF:
 1467 bp

 Locus ID:
 2159

 UniProt ID:
 P00742

Cytogenetics: 13q34

Domains: GLA, Tryp_SPc, EGF_CA, EGF, EGF

Protein Families: Druggable Genome, Protease, Transmembrane

Protein Pathways: Complement and coagulation cascades

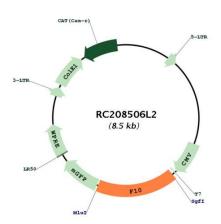
MW: 54.7 kDa



Gene Summary:

This gene encodes the vitamin K-dependent coagulation factor X of the blood coagulation cascade. This factor undergoes multiple processing steps before its preproprotein is converted to a mature two-chain form by the excision of the tripeptide RKR. Two chains of the factor are held together by 1 or more disulfide bonds; the light chain contains 2 EGF-like domains, while the heavy chain contains the catalytic domain which is structurally homologous to those of the other hemostatic serine proteases. The mature factor is activated by the cleavage of the activation peptide by factor IXa (in the intrisic pathway), or by factor VIIa (in the extrinsic pathway). The activated factor then converts prothrombin to thrombin in the presence of factor Va, Ca+2, and phospholipid during blood clotting. Mutations of this gene result in factor X deficiency, a hemorrhagic condition of variable severity. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing to generate mature polypeptides. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RC208506L2