

Product datasheet for **SC321891**

Factor X (F10) (NM_000504) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Factor X (F10) (NM_000504) Human Untagged Clone
Tag:	Tag Free
Symbol:	Factor X
Synonyms:	FX; FXA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000504.3
 GTCCCAGTGAGGACAGGGACACAGTACTCGGCCACACCATGGGGCGCCACTGCACCTCG
 TCTGCTCAGTGCCTCCCTGGCTGGCCTCCTGCTGCTCGGGGAAAGTCTGTTTCATCCGCA
 GGGAGCAGGCCAACCAACATCCTGGCGAGGGTCACGAGGGCCAATTCCTTTCTTGAAGAGA
 TGAAGAAAGGACACCTCGAAAGAGAGTGCATGGAAGAGACCTGCTCATACGAAGAGGCC
 GCGAGGTCTTTGAGGACAGCGACAAGACGAATGAATTCTGGAATAAATACAAAGATGGCG
 ACCAGTGTGAGACCAGTCTTGGCAGAACCAGGGCAAATGTAAGACGGCCTCGGGGAAT
 ACACCTGCACCTGTTTAGAAGGATTCGAAGGCAAAAAGTGAATTATTACACGGAAGC
 TCTGCAGCCTGGACAACGGGACTGTGACCAGTCTGCCACGAGGAACAGAACTCTGTGG
 TGTGCTCCTGCGCCCGGGTACACCCTGGCTGACAACGGCAAGGCCTGCATTCCCACAG
 GGCCCTACCCCTGTGGGAAACAGACCCTGGAACGCAGGAAGAGGTGAGTGGCCAGGCCA
 CCAGCAGCAGCGGGAGGCCCTGACAGCATCACATGGAAGCCATATGATGCAGCCGACC
 TGGACCCACCGAGAACCCTTCGACCTGCTTGACTTCAACCAGACGCAGCCTGAGAGGG
 GCGACAACAACCTCACCAGGATCGTGGGAGGCCAGGAATGCAAGGACGGGGAGTGTCCCT
 GGCAGGCCCTGCTCATCAATGAGGAAAACGAGGGTTTCTGTGGTGGAACTATTCTGAGCG
 AGTTCTACATCCTAACGGCAGCCACTGTCTCTACCAAGCCAAGAGATTCAGGTGAGGG
 TAGGGGACCGGAACCGGAGCAGGAGGAGGGCGGTGAGGCGGTGCACGAGGTGGAGGTGG
 TCATCAAGCACAACCGGTTACAAAGGAGACCTATGACTTCGACATCGCCGTGCTCCGGC
 TCAAGACCCCATCACCTTCCGATGAACGTGGCGCCTGCCTGCCCTCCCGAGCGTGACT
 GGGCCGAGTCCACGCTGATGACGAGAAGACGGGGATTGTGAGCGGCTTCGGGCGCACCC
 ACGAGAAGGGCCCGCAGTCCACCAGGCTCAAGATGCTGGAGGTGCCCTACGTGGACCGCA
 ACAGCTGCAAGCTGTCCAGCAGCTTCATCATCACCCAGAACATGTTCTGTGCCGGCTACG
 ACACCAAGCAGGAGGATGCCTGCCAGGGGGACAGCGGGGCCCCGACGTACCCGCTTCA
 AGGACACCTACTTCGTGACAGGCATCGTCAGCTGGGGAGAGGGCTGTGCCCGTAAGGGGA
 AGTACGGGATCTACCAAGGTACCGCCTTCTCAAGTGGATCGACAGGTCCATGAAAA
 CCAGGGGCTTGCCCAAGGCAAGAGCCATGCCCGGAGGTATAACGTCCTCTCCATTAA
 AGTGAGATCCCACTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA



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Restriction Sites:	Please inquire
ACCN:	NM_000504
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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> , <u>NP_000495.1</u>
RefSeq Size:	1560 bp
RefSeq ORF:	1467 bp
Locus ID:	2159
UniProt ID:	<u>P00742</u>
Cytogenetics:	13q34
Domains:	GLA, Tryp_SPc, EGF_CA, EGF, EGF
Protein Families:	Druggable Genome, Protease, Transmembrane
Protein Pathways:	Complement and coagulation cascades

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 intrinsic pathway), or by factor VIIa (in the extrinsic pathway). The activated factor then converts prothrombin to thrombin in the presence of factor Va, Ca²⁺, 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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest protein (isoform 1).