

Product datasheet for **SC303105**

Factor XIII (F13B) (NM_001994) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Factor XIII (F13B) (NM_001994) Human Untagged Clone
Tag:	Tag Free
Symbol:	F13B
Synonyms:	FXIIIB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

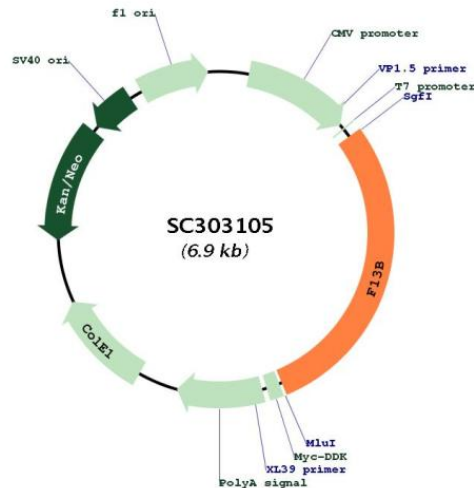


[View online »](#)

Fully Sequenced ORF: >SC303105 representing NM_001994.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAGGTTGAAAAACCTGACTTTTATCATCATATTGATAATCTCAGGAGAACTCTATGCAGAAGAGAAA
CCCTGTGGTTTTCTCATGTGAAAAATGGAAGAATTGCCCAATTTACTATACTTTTAAAAGCTTTTAC
TTTCCAATGAGCATAGACAAAAAATTGTCATTTTCTGCTTGGCTGGTTATACCACTGAAAGTGGGAAGA
CAAGAAGAGCAAACCACGTGTACAACAGAAAGGCTGGTCTCCAGAGCCAAGGTGCTTCAAAAAATGCACT
AAGCCTGACCTGAGTAATGGTTACATCTCTGATGTAAAGTTATTGTATAAAATCAAGAGAACATGCGT
TATGGTTGCGCTTCAGGGTACAAAACCACTGGAGGGAAGGATGAAGAAGTGGTTCAATGTCTCTCTGAT
GGATGGTCTTCTCAACCAACCTGTAGGAAAGAACATGAAACATGTTTGGCTCCTGAATTATATAATGGA
AATTATCCACAACACAGAAAACATTCAAAGTGAAGGACAAAGTACAATACGAATGTGCTACTGGCTAC
TACACAGCTGGAGGAAAGAAGACAGAGGAGGTAGAATGTCTCACATACGGATGGTCTCTCACACAAAA
TGTACCAATTAAGTGTCTTCTTTAAGATTAATTGAAAATGGTTATTTTCATCCTGTAAGCAAACC
TATGAAGAAGGAGATGTGTTTCAGTTTTTCTGTCATGAAAATTATTATCTAAGTGGATCTGATTTAATT
CAATGCTATAACTTTGGTTGGTACCCAGAATCTCTGTATGCGAAGGAAGAAGAAACAGATGTCCTCCT
CCACCTCTGCCATAAATCCAAAATCAAAACACATTCACAACCTTATCGTCATGGAGAAAATAGTTCAT
ATAGAATGTGAECTTAATTTTGAGATCCATGGGTGAGCAGAAAATACGTTGTGAAGATGGAATAATGGACA
GAACCTCCAAAATGCATTGAAGGACAGGAGAAGGTAGCCTGTGAGGAACCACTTCATTGAAAATGGT
GCAGCAAAATTTACTCTAAGATTTATTACAATGGGGATAAAGTACATATGCATGTAAAAGCGGCTAC
CTTCTCCATGGATCGAATGAGATAACTTGTAAATCGTGGAAAATGGACACTTCTCCTGAGTGTGTGAA
AATAATGAGAATTGTAAGCATCCTCCTGTTGTAATGAATGGGGCTGTTGCAGACGGGATATTGGCAAGC
TATGCAACAGGATCCTCAGTGGAAATATAGATGCAATGAATATTACTTACTGAGGGGATCAAAAATATCT
CGTTGCGAACAAGGAAAATGGTCAATCCCACTGTTTGGTGGAAACCATGTAATGTGATTAC
ATGAACAGAAAATAACATAGAAAATGAAGTGGAAATATGAAGGGAAGTCTTACATGGAGATTTAATAGAT
TTTGTATGTAACAGGGATATGACTTATCTCCATTAACCCATTGTCTGAATTATCTGTGCAAGTCAAC
AGAGGAGAAGTAAAATATCCTTTATGTAAGTAAAAGAAATCTAAAGGAATGTGCACATCTCCTCCTCTT
ATTAACATGGAGTCATTATTAGTTCAACAGTAGACACCTATGAAAATGGCTCTTCAGTAGAATACAGA
TGTTTTGATCACCATTTCTAGAAGGATCTAGGGAGCCTATTGTTTAGATGGAATGTGGACTACACCA
CCATTGTGTTTAGAGCCATGCACATTATCTTTACTGAAATGGAAGAATAATTTACTTCTGAAATGG
GATTTTGAACAATAGACCACATTTTGCATGGTGAATATATTGAGTTTATTGTAGAGGAGATACTTAT
CCAGCTGAATTATATATTACTGGATCTATACTTGAATGCAATGTGACAGAGGGCAGTTAAAATATCCA
AGATGTATTCCAAGACAAAGCACTCTGTCTTATCAAGAACCCTTAAGAACA TAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_001994

Insert Size: 1986 bp

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:

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: [NM_001994.2](#)

RefSeq Size: 2217 bp

RefSeq ORF: 1986 bp

Locus ID: 2165

UniProt ID: [P05160](#)

Cytogenetics: 1q31.3

Protein Families:	Druggable Genome
Protein Pathways:	Complement and coagulation cascades
MW:	75.5 kDa
Gene Summary:	<p>This gene encodes coagulation factor XIII B subunit. Coagulation factor XIII is the last zymogen to become activated in the blood coagulation cascade. Plasma factor XIII is a heterotetramer composed of 2 A subunits and 2 B subunits. The A subunits have catalytic function, and the B subunits do not have enzymatic activity and may serve as a plasma carrier molecules. Platelet factor XIII is comprised only of 2 A subunits, which are identical to those of plasma origin. Upon activation by the cleavage of the activation peptide by thrombin and in the presence of calcium ion, the plasma factor XIII dissociates its B subunits and yields the same active enzyme, factor XIIIa, as platelet factor XIII. This enzyme acts as a transglutaminase to catalyze the formation of gamma-glutamyl-epsilon-lysine crosslinking between fibrin molecules, thus stabilizing the fibrin clot. Factor XIII deficiency is classified into two categories: type I deficiency, characterized by the lack of both the A and B subunits; and type II deficiency, characterized by the lack of the A subunit alone. These defects can result in a lifelong bleeding tendency, defective wound healing, and habitual abortion. [provided by RefSeq, Jul 2008]</p>