

Product datasheet for **MR220953**

F13a1 (NM_028784) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	F13a1 (NM_028784) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	F13a1
Synonyms:	1200014I03Rik; AI462306; F13a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR220953 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCAGATACTCCAGCAAGCACCTTTGGGGGAGGCGAGCAGTCCCGCCAATAACTCCAATGCTGCAG
AAGTGGACCTCCCAACTGAGGAGCTACAAGGCCTGGTGCCAAGGGGTGTCAACCTGAAAGATTACCTGAA
TGTCCACAGCTGTTACCTGTTCAAGGAGAGATGGGACAGTAACAAGATTGATCACCACACAGACAATAT
GACAACAATAAGTTGATTGTCCGCAGAGGGCAGACCTTCTACATCCAGATTGACTTCAACCGTCCCTATG
ACCCAGGAAGGATCTCTTCAGAGTGGAAATATGTCATTGGTGCCTACCCTCAGGAGAACAAGGGCACCTA
CATCCCTGTGCCTGTAGTAAAGAGCTGCAAAGCGAAAGTGGGGAGCCAAGGTTATCATGAATGAGGAC
CGGTCCGTGCGACTTCCGTTCACTTCTCCGGAATGCATTGTGGGAAATTCCGCATGTATGTTGCAG
TCTGGACTCCCTATGGCATCCTGCGTACTCGAAGAGACCCAGAAACAGACACATATATTCTTTCAACCC
TTGGTGTGAAGAGGACGCTGTGTATCTGGATGATGAGAAGGAAAGAGAAGAGTACGTCCTGAATGACATT
GGAGTGATATTTTATGGGGACTTCAAAGACATCAAGAGCAGAAGCTGGAGCTATGGCCAGTTCGAAGACG
GCATCCTGGATACTTGCTTGTATGTGATGGACAAAGCTGAGATGGACCTTCTGGCAGAGGCAACCCCAT
CAAAGTCAGCCGAGTTGGATCAGCAATGGTGAATGCCAAGGATGATGAAGGTGTTCTTGTGGATCATGG
GACAATGTCTATGCCTACGGCATCCCTCCATCAGCCTGGACAGGAAGTGTGACATTCTACTAGAATACA
GAAGCTCGGAAACACCAGTCCGATATGGCCAGTGTGGGTTTTGCTGGTGTCTTAAACACATTTTAAAG
ATGCCTTGGAAATCCCTGCACGAGTCATTACCAATTACTTCTCGGCCACGACAATGATGCCAATCTGCAA
ATGGACATCTTCTGGAAGAAGATGGGAATGTGAGCTCCAAACTCACAAGGATTCGGTGTGGAAGTACC
ACTGTGAAGCAAGCGTGGATGACAAGCCTGATCTTCTGTTGGATTGGAGGCTGGCAAGCTGGTGA
CAGCACACCCAGGAAAACAGTGTGGCATGTACCGCTGTGGCCCTGCCTCTGTCCAAGCCGTTAAGCAT
GGCCATGTCTGCTCCAGTTTGTATGCCCGTTTGTGTTTGCAGAGGTCAACAGTGTCTTGTGTTACATCA
CAGCTAAGCAAGATGGCACTCACGTGGTGAAGCCGTGGATGCCACCCATATCGGGAAGCTAATTGTGAC
CAAGCAAATTGGAGGAGATGGCATGCAGGATATCACGGATACTTACAAATTTCAAGAAGGCCAAGAAGAA
GAGAGACTAGCCCTTGAAGTCTGATGTATGGAGCCAAGAAGACCCTCAACACTGAAGGTGTTGTCA
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TATCACCTTCCAGAAATAGCTCCAATCTGTACACCATCCTGGCCTATCTTTCTGGCAACATCACCTTC
TACTGTTGGGTATCCAAGAAAGAGTTCAAGAAGGAGTCTTTGAAGAGACGCTGGATCCCTTTCTCCTCCA
AGAAAAAGGAGGTGCTGGTCAGAGCGGGCGAGTACATGAGCCACCTTCTAGAACAGGGCTTCTTGCACTT
CTTCGTACCGGCACGCATCAACGAGTCCAGGGATGTCCTGGCCAAACAAAAGTCCATAATACTGACTATC
CCCAAGATCACCATCAAGGTCCGAGGTGCTGCCATGGTTGGCTCTGATATGGTTGTGACTGTTGAGTTCA
CTAATCCTTTAAAGAAACACTACAAAATGTCTGGATTCAATTTGGATGGTCTGGAGTGATGAGACCCAA
GAGAAAGGTGTTCCGTGAAATCCGGCCCAACACCAGGTGCAGTGGGAAGAAGTCTGTCCGCCTTGGGTC
TCTGGCCATCGGAAGCTGATTGCCAGCATGACCAGTACTCCCTGAGACATGTGTATGGAGAGCTGGATC
TTCAGATTCAAAGACGACCTACTATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR220953 protein sequence
Red=Cloning site Green=Tags(s)

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MSDTPASTFGGRRVPPNNSNAAEVDLPTTELQGLVPRGVNLKDYLNVTAVHLFKERWDSNKIDHHTDKY
DNNKLI VRRGQTFYIQIDFNRPYDPRKDLFRVEYVIGRYPQENKGTYPVPVVKELQSGKWGAKVIMNED
RSVRLSVQSSPECIVGKFRMYVAVWTPYIGILRTRRDPETDTYILFNPWCEEDAVYLDDEKEREEYVLDNDI
GVIFYGDFKDIKRSWSYGFEDGILDTCLYVMDKAEMDLSGRGNPIKVS RVGSAMVNAKDDEGLVVGSW
DNVYAYGIPPSAWTGSVDILLEYRSSETPVRYGQCWVFAGVFNTFLRCLGIPARVITNYFSAHDNDANLQ
MDIFLEEDGNVSSKLTKDSVWNYHCWNEAWMTRPDLVPGFGGWQAVDSTPQENS DGM YRCGPASVQAVKH
GHVCFQFDAPFVFAEVNSDLVYITAKQDGHVVEAVDATHIGKLI VTKQIGGDGMQDITDTYKFEQEQEE
ERLALETALMYGAKKTLNTEGVVKSRSVDVTMNFVENVAVL GKDFKVTITFQNSSNL YTILAYLSGNITF
YTGVSKKEFKKESFEETLDPFSSKKKEVLVRAGEYMSHLL EQGFLHFFVTARINESRDLAKQKSIILTI
PKITIKVRGAAMVGSMDVVTVFETNPLKETLQNVWIHL DGP GVMRPRKRVFREIRPNTTVQWEEVCRPWV
SGHRKLIASMTSDSLRHVYGELDLQIQRRPTM
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_028784

ORF Size: 2199 bp

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: [NM_028784.3](#), [NP_083060.2](#)

RefSeq Size: 3879 bp

RefSeq ORF: 2199 bp

Locus ID: 74145

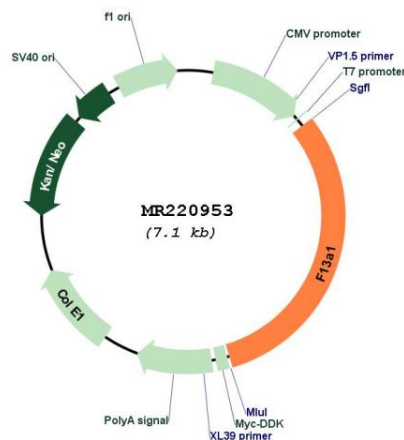
UniProt ID: [Q8BH61](#)

Cytogenetics: 13 A3.3

MW: 83.2 kDa

Gene Summary: This gene encodes subunit A of the coagulation factor XIII that catalyzes the final step of the blood coagulation pathway. The encoded protein associates with subunit B to form a heterotetrameric proenzyme that undergoes thrombin-mediated proteolysis to generate active factor XIIIa. The transglutaminase activity of factor XIIIa is required for the calcium-dependent crosslinking of fibrin, leading to the formation of a clot. Mice lacking the encoded protein display impaired reproduction and reduced survival due to bleeding episodes, hemothorax, hemoperitoneum and subcutaneous hemorrhage. Additionally, mice lacking the encoded protein exhibit impaired wound healing and inadequate healing of myocardial infarction. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

Product images:



Circular map for MR220953