

## Product datasheet for **SC127750**

### **MCFD2 (AK095006) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MCFD2 (AK095006) Human Untagged Clone
Tag:	Tag Free
Symbol:	MCFD2
Synonyms:	F5F8D; F5F8D2; LMAN1IP; SDNSF
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None



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**Fully Sequenced ORF:** >NCBI ORF sequence for AK095006, the custom clone sequence may differ by one or more nucleotides

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CCACAGTCCAAAGTCTCATCTGAGACAAGGCAAGTCCCTTCCACCTATGAGCCTGTAAAATCAAAGCAA
GCTAGTTACTTCTAGATACCAACAGGGGTACAGGTATTGATTAAGACGGCTGTTCCAAATGGGAGAAA
TTGGCCAAAATAAAGGGTTACAGGGCCCATGCAAGTCCGAAATCCAGCAGGGCTGTCAAATTTAAAGT
TCCAGAATAATCTCCTTTGACTCCAGGTCTCACATCCAGGTCACTGATGCAAGAAGTGGGTCCCATG
GTCTTGGGCAGCTCTGCCCTGTGGCTTTGTAGGGTACAGCCTCCCTCCTGGCTGCTTTCACGGCTGTTG
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GACGGTGGCCCTTCTCACAGCTCCACTAGGCAGTGCCCGAGTAGGGACTCTGTGTGGGGGCTCCACACA
CCACATCCCCTTCTGCACTGCCCTAGCAGAGTTCTCTCCCCTGCCGCTGAGAGGGCTCTCCCCTGCA
GCAAACGTTTGCCTGGGCATTGAGGCATTTCCATACATCTTGTAAAATAGGCGGAGGTTTCCAAATCT
CAATTCCTGACTCTGTGCACCTGCAGGCTTAACAGCACATAGAAGCTGCCAAGGCTTGGGGCTTCCACT
CTGAAGCCACAGCCCAGCTGTATGTTGGCCCTTTCCAGCATGGCTGGAGTGGCTGGGACACAAGACAC
CAAGTCCCTAGGCTGCACACACATGTCCAGGGGCTGCCCTGACATGGCTGGAGACATTTTCCCATGGTG
TTGGGGATTAACATTAGGCTCCTTGCTACTTATGCAAATTTCTGCAGCTGGCTTGAATTTCTCCCAGAA
AATGGGTTTTTCTTTCTATTGCATAGTCAGGCTGCAAATTTCCAACTTTTATGCTTTGCTTCCCTTAT
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CAGTCTCTTTGCTAAAACATAACAAGAGTACCTTTACTCCAGTCCCAACAAGTTCCTCATCTTCATCT
GAGGCCACCTCAGCCTGGACTTTGTTGTCCATATTGCTATCAGCATTGGGGCAAAGCCATTCAACAAGT
CTGTGAAGATTCCAACTTTCCACATTTTCTGTTTTCTGAGCCCTCCAACTTCCAGCCTCT
GCCTGTTACCCAGTTCCAAAGTCACTTCCACATTTTGGGTATTTCTTCCAGCAGGTCCCAATCTACTGGTA
CCAATTTACTGTATTAGTCCGTTTTACGCTGCTGATAAAGACATACCCGAGACTGGGAAGAAAAAGTGG
TTAATTGGACTTAAAGTCCACATGGCTGGGGAGGCCTCAGAATCATGGTGGGAGGCAAAAGACACTTC
TTACATTGTGGCAAGAAAAAATGAGGAAGAAGCAAAAGCAGAAACCCCTGATAAACTGATCAGATCTCAT
GAGACTTATTCACTGTCACGAGAATAGCACGGGAAAGACTGGCCCCATGATTCAATTACCTCCCCTGG
GTCTGTCCCAACACAGTGGGAATTCTGGGAGATACAATTCAAGTTGAGATTTGTGGGGGACACAACCA
AACCATATCAGCATCCTTCAAGAATATTAGATAATTGGAGCTGAGTACTCAGGAACTTGACTGTAGTAG
AATACCGTAGTTTCTTAATTTAATTCACATCACCTGAAAAGTAAAACAACAGGCTTTGCCAAGTGGAT
GCTTTTCAGTAACAGTGAAGTGGAGTGAATACCAATGTTTGCCTGGTGGTTCCTATCTTTCAGGCAA
ACATGGTCAGTATTCTGTAAAGTCCCCTGGCCTAAATGATTACTTGTCTGGGCAAGTGGATATTTATT
AGGCTATTTCAAAGCCACAGCATAAGAATGTCAGCCTAGCCACAGAGTCTGAGATTCTGAGTTACGCCTA
GCCACAGAGTCTAAGATTCTGTATCCTCTGACATTTTGGAAATGATACACTACTGGCTTAAAGTATGACT
CTTTCAGATTTTCAGTATTTTATACTACTGCCACATCCTTATACTTTATTGCTTTTCTGTCTTCTTC
AACCTGGGAGAGACCCTGAATTTGAGTGTGTTCTCTAATCAATAGTGGTTAGCTTTCTTTTCTATTTCA
CTCGTTTCTAGGGTTTTTTATTTGCAGTTTAGGAACTACTAGGAATGTCAGGACTTTATCAGCAGGGGTA
AACTACCACCTGGCCTAGCCTAAGTAGGAAGTAAAAGATAATCACCAACAATGATTAATCAGATAG
AAGTTCTAGTCAAGAGGGATATTGTTGAAGTTACCTCTTTTAGCCTAGATACATGGATTCTTTTCAAATC
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TTATAAGAAAACATATGATTTGTAATAATGGTTTCTGTGTCAAGTATTTGTGCAGTCAAGCTGACTT
GTAACTATTCTGTAATAGCTCATTATTTGAAAGATTTATATATGATGAATTCGGATATATGACCAA
TAAAACCTGATGAAGC
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for AK095006 unedited GAATTCGGCAGCAGGAGAAATTGGCCAAAATAAAGGGTTACAGGGCCCATGCAAGTCCG AAATCCAGCAGGGCTGTCAAATTTAAAGTTCCAGAATAATCTCCTTTGACTCCAGGTCT CACATCCAGGTCACTACTGATGCAAGAAGTGGGTCCCATGGTCTTGGGCAGCTCTGCCCC TGTGGCTTTGTAGGGTACAGCCTCCCTCCTGGCTGCTTTCACGGCTGTTGTTTCAGTGCCT GCGGCTTTTCCAGGTGCACGGTGAAGCTGTTGGTGGATCTACCATTCTGGGGTCTGGAG GACGGTGGCCCTCTTCTCACAGTCCACTAGGCAGTGCCCAAGTAGGGACTCTGTGTGGG GGCTCCACACCACATTTCCCTTCTGCACTGCCCTAGCAGAGGTTCTCTCCCTGCCGCT GAGAGGGCCTCTCCCTGCAGCAAATTTTGCCTGGCATTGAGGCATTTCCATACATCT TCTGAAACTAGGCGGAGGTTTCCAAATCTCAATTCTTGACTTCTGTGCACCTGCAGGCTT AACAGCACATAAAAGCTGCCAGGCTTTGGGGCTTCCACTGTAACCACAGCCNAGCTGTA TTGTGGGCCCTTTCACCCTGGGTTGAAGGGGCTGGGACACAGAACCAAGCCCTAGGCTGA CACCCATGTAAAGGGCTGCCCTGCATGCCTGAAACATTTCCCGGGGTTGGGGATAAAC TTAGGCTCTTGCTCTAAGCAAATCTGGGCCGGGCTGAATTC
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	AK095006
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">AK095006.1</a>
<b>RefSeq Size:</b>	2885 bp
<b>RefSeq ORF:</b>	2885 bp
<b>Locus ID:</b>	90411
<b>Cytogenetics:</b>	2p21

**Gene Summary:**

This gene encodes a soluble luminal protein with two calmodulin-like EF-hand motifs at its C-terminus. This protein forms a complex with LMAN1 (lectin mannose binding protein 1; also known as ERGIC-53) that facilitates the transport of coagulation factors V (FV) and VIII (FVIII) from the endoplasmic reticulum to the Golgi apparatus via an endoplasmic reticulum Golgi intermediate compartment (ERGIC). Mutations in this gene cause combined deficiency of FV and FVIII (F5F8D); a rare autosomal recessive bleeding disorder characterized by mild to moderate bleeding and coordinate reduction in plasma FV and FVIII levels. This protein has also been shown to maintain stem cell potential in adult central nervous system and is a marker for testicular germ cell tumors. The 3' UTR of this gene contains a transposon-like human repeat element named 'THE 1'. A processed RNA pseudogene of this gene is on chromosome 6p22.1. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Apr 2016]