

## Product datasheet for **SC118113**

### Supervillin (SVIL) (NM\_003174) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | Supervillin (SVIL) (NM_003174) Human Untagged Clone   |
| Tag:                      | Tag Free  |
| Symbol:                   | Supervillin   |
| Synonyms:                 | MFM10   |
| Mammalian Cell Selection: | None  |
| Vector:                   | <u>pCMV6-XL4</u>  |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |
| Fully Sequenced ORF:      | >NCBI ORF sequence for NM_003174, the custom clone sequence may differ by one or more nucleotides |

```

ATGAAAAGAAAAGAAAGAATTGCCAGGCGCCTGGAAGGGATTGAAAATGACACTCAGCCCATCCTCTTGC
AGAGCTGCACAGGATTGGTGACTCACCGCTGCTGGAGGAAGACACCCCTCGATACATGAGAGCCAGCGA
CCCTGCCAGCCCCACATCGGCCGATCAAATGAAGAGGAGGAACTTCTGATTCTTCTAGAAAAGCAA
ACTCGATCCAAATACTGCACAGAAACCTCCGGTGTCCACGGTGACTCACCTATGGTTCGGGTACCATGG
ACACCCACAGTCTGGAGTCCAAAGCCGAAAGAATTGCAAGGTACAAGCAGAAAGAAGGCGACAGCTGGC
AGAGAAGTATGGGCTGACTCTGGATCCCGAGGCCGACTCCGAGTATTTATCCCGCTATACCAAGTCCAGG
AAGGAGCCTGATGCTGTGAGAAGCGGGGAGGAAAAAGTGACAAACAGGAAGAGTCAAGCAGAGATGCTA
GTTCTCTGTACCCCGGGACCGAGACGATGGGGCTCAGGACCTGTGCCGGTGAATCCAAGGACTATGCCCT
CCATGTGGGTGACGGCTCTCCGACCCGGAGGTGCTGCTGAACATAGAAAACCAAAGACGAGGTCAAGAG
CTGAGTGCCACCCCGCAGGCCATGACCTGTCCCCAGCAGCCGAGAGTTCCTCGACCTTCTCTTTCTCTG
GGCGAGACTCCTCCTTCACTGAAGTGCCACGGTCCCCAAGCAGCCACAGCTCCTCCCTGCAGCAGGC
AGCCTCCCGGAGCCCCTCCTTTGGTGACCCACAGCTATCCCTGAGGCCCGACCCAGGTGCACCTTCACAT
TCAGAAACGCCAACTGTCGATGATGAAGAAAAGGTGGAAGAACGACCAAGCTGAGCGTCGCCGCCAAGA
GGTTGCTTTTCAGGGAGATGGAAAAATCTTTTGATGAACAAAATGTTCCAAAGCGACGCTCAAGAAAACAC
AGCTGTGGAGCAGAGGCTACGCCGCTGCAGGACAGGTCCCTCACCCAGCCATCACCACTGAAGAGGTG
GTCATCGCAGCCACATTGCAGGCCTCTGCTCACCAAAAAGGCCTTAGCCAAGGACCAGACAAATGAGGGCA
AAGAGCTTGCTGAGCAAGGAGAACCTGATTCTCCTCACTCTAAGCTTGGCCGAAAAGTTGGCCTTGTTTAA
CAAATTGTCCCAGCCAGTCTCAAAGCGATTTCTACCCGGAACAGAATAGACACGAGACAGAGGAGAATG
AACGCTCGCTATCAAACCTCAGCCAGTCACACTGGGAGAGGTGGAGCAGGTGCAGAGTGGAAAGCTCATT
CTTTCTCACCTGCCGTGAACACATCAGTGTCTACCGTAGCATCCACGGTGTCTCAATGTATGCCGGAGA
TCTTCGCACAAAGCCACCTTTGACCACAATGCAAGTGCCACTGACTATAAGTTTTCTTCTCAATAGAA
AATTCGGACTCTCAGTGAAGCATTCTGAAATCGCAAGCTTGGCAGCCTTTGGTAGAGGTAGCGAGA
ACAAGGGAAATGTTGAGAGAATATGGAGAGACAGAAAGCAAGAGAGCTTTGACAGGTGCAGACAGTGGAT

```



[View online >](#)

GGAGAAGTATGGGTCTTTGAGGAAGCAGAAGCATCTACCCATCCTGAACCGAGCCAGGGAAGGAGAC  
 AGCCATAAGGAATCTAAATATGCTGTTCCAGAAAGGAAAGCCTGGAACGGGCGAACCTCCCATCACCC  
 ACCTCGGGGATGAACCGAAGGAATTTCCATGGCTAAAATGAATGCACAAGGAACTTGGACTTGAGGGA  
 CAGGCTGCCCTTTGAAGAGAAGTGGAGGTGGAGAATGTTATGAAAAGGAAGTTTCACTAAGAGCGGCA  
 GAGTTCGGGGAGCCACTTCCGAGCAGACGGGGACAGCTGCTGGGAAAATTTGCTCAAACCACAGCCC  
 CCGTGTCTGGAGAGATCAAAACGCCGACAGGGGAGGGCCTTCTGACTCACCCAGCAAACCATGTGCGAT  
 ATTAAGAAAGATTGGCACTGTTGAAGAAAAGCGGGGAGGAAGTTGGAGAAACAGACTCAGCAGGAGGC  
 AGGAGGGCGCAAGGCGCCGCCAGCAGCTGCACACCCAGGAAGCAGGGCGGTCCCTCATCAAGAAGCG  
 GGTACAGAAAGTCGAGAGAGCCAAATGACGATTGAGGAGAGGAAGCAGCTCATCACTGTGAGAGAGGAG  
 GCCTGGAAGACGAGAGGCAGAGGAGCGGCCAACGACTCGACCCAGTTCCTGTGGCTGGCAGGATGGTGA  
 AGAAAGTTTGGCGTCACCTACTGCCATAACCCAGTAGCCTCACCCATTTGCGGTAAAACAAGAGGCAC  
 CACACCCGTTTCAAACCCCTGGAAGATATCGAAGCCAGACCAGATATGCAGTTAGAATCGGACCTGAAG  
 TTGGACAGGCTGGAACCTTTCTAAGAAGGCTGAATAACAAAGTTGGCGGATGCACGAAACGGTGTCTCA  
 CTGTCACCGCAAATCTGTGAAGGAGGTGATGAAGCCAGATGATGATGAAACCTTTGCCAATTTTACCG  
 CAGCGTGGATTATAATATGCCAAGAAAGTCTGTGGAGATGGATGAGGACTTCGATGTCATTTTCGATCCT  
 TATGCACCCAAATTGACGTCTTCCGTGGCCGAGCAAGCAGGGCAGTTAGGCCAAAGCGCCGGTTCAGG  
 CCTCAAAAACCCCTGAAAATGCTGGCGGCAAGAGAAGATCTCCTTCAGGAATACACTGAGCAGAGATT  
 AAACGTTGCCCTCATGGAGTCAAAGCGGATGAAAGTAGAAAAGATGTCTTCCAACCCAACCTTCTCAGAA  
 GTCACCCCTGGCGGGTTTAGCCAGTAAAGAAAATTCAGCAACGTGAGCCTGCGGAGCGTCAAACCTGACGG  
 AACAGAAGTCTAACAACAGCGCCGTGCCCTACAAGAGGCTGATGCTGTTGCAGATTAAGGAAGAAGACA  
 TGTGCAGACCAGGCTGGTGAACCTCGAGCTTCGGCGCTCAACAGTGGGGACTGCTTCTCTGCTCTCT  
 CCCCAGTGTCTTCTGTGGTGGTGGAGAGTTTGCACAGTATAGAAAAGGCGAAGGCCCTCAGAAGTTG  
 CAACCTTAATTCAGACAAAGAGGAACTTGGTTGTAGAGCTACTTATATCCAACCATTAAGAAGGAAT  
 TAATACACACACTCATGCAGCCAAAGACTTCTGGAAGCTTCTGGGTGGCCAAACAGTTACCAATCTGCT  
 GGAGACCCAAAAGAAGATGAACTCTATGAAGCAGCCATAATAGAAAATAACTGCATTTACCGTCTCATGG  
 ATGACAAACTTGTCTGATGACGACTACTGGGGAAAATTCGGAAGTGTCCCTTCTGCAACCCAAAGA  
 GGTACTGGTGTGTTGATTTTGGTAGTGAAGTTTACGTATGGCATGGGAAAGAAGTACATTAGCACAAAGCA  
 AAAATAGCATTTCAGCTGGCAAAGCACTTATGGAATGGAACCTTTGACTATGAGAACTGTGACATCAATC  
 CCCTGGATCCTGGAGAATGCAATCCGCTTATCCCCAGAAAAGGACAGGGGCGCCGACTGGGCGATATT  
 TGGGAGACTTACTGAACACAATGAGACGATTTTGTCAAAGAGAAGTTTCTGGATTGGACGGAAGTGAAG  
 AGATCGAATGAGAAGAACCCCGGGAAGTTCGCCAGCACAAAGGAAGACCCAGGACTGATGTCAAGGCAT  
 ACGATGTGACACGGATGGTGTCCATGCCCCAGACGACAGCAGGCACCATCCTGGACGGAGTGAACGTCGG  
 CCGTGGCTATGGCCTGGTGAAGGACACGACAGGAGGCAGTTTGAGATCACACAGCGTTTCCGTGGATGTC  
 TGGCACATCCTGGAATTCGACTATAGCAGGCTCCCCAAACAAAGCATCGGGCAGTTCCATGAGGGGGATG  
 CCTATGTGGTCAAGTGAAGTTTCAATGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT  
 GAGGGCAGCCGGCAAAGAGAAGTGGTCTACTTCTTGGCAAGGCCGGCACTCCACCGTGGTGGTGGTGGT  
 GGCACGTGGCGCTGATGACGGTGGAGCTGGACGAGGAAAGGGGGGCCAGGTCAGGTTCTCCAGGGAA  
 AGGAGCCCCCTGTTTCTGCAAGTGTTCAGGGGGGGATGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT  
 AGAAGAAAATGTCAAAGTGGTGGCGGCTGACTGCGTGGAGAGGTGCCCGTGGAAAGGAAATTTG  
 CTGGAAGTGGCCTGCTACTGTAGCAGCCTGAGGTCCAGAACTTCCATGGTGGTGGTGGTGGTGGTGGTGGT  
 CCCTCATCTACCTGTGGCAGGATGCAAAGCCAGGCCACACGAAGGAGGTGGAAAGGACCGCTGCGAA  
 CAAGATCAAGGAACAATGTCCCCTGGAAGCAGGACTGCATAGTAGCAGCAAAGTCAACAACACAGGATGT  
 GATGAAGGCTCCGAGCCACTCGGATTCTGGGATGCCTTAGGAAGGAGAGACAGGAAAGCCTACGATTGCA  
 TGCTTCAAGATCCTGGAAGTTTAACTTCGCGCCCGCTGTTTCACTCAGCAGCTCCTCTGGGGATT  
 TGCAGCCACAGAGTTTGTGTACCCTGCCGAGCCCTCTGTGGTCAAGTCCATGCCCTTCTGCAGGAA  
 GATCTGTACAGCGCGCCAGCCAGCAGCTTTTCTTGTGACAATCACACGAGGTGACCTCTGGCAAG  
 GCTGGTGGCCATCGAGACAAGATCACTGGTTCCGCCCGCATCCGCTGGGCCTCCGACCCGAAGAGTGC  
 GATGGAGACTGTGCTCCAGTACTGCAAAGGAAAAATCTCAAGAAACAGCCCCAAGTCTTACCTTATC  
 CACGCTGGTCTGGAGCCCTGACATTACCAATATGTTTCCCAGCTGGGAGCACAGAGAGGACATCGCTG  
 AGATCACAGAGATGGACACGGAAGTTTCCAATCAGATCACCTCGTGGAAAGAGCTTAGCCAAGCTCTG  
 TAAACCATTTACCCGCTGGCCGACCTCTGGCCAGGCCACTCCCGAGGGGGTTCGATCCTCTGAAGCTT

GAGATCTATCTACCGACGAAGACTTCGAGTTTGCAGTACATGACGAGGGATGAATACAACGCCCTGC  
CCGCTGGAAGCAGGTGAACCTGAAGAAAGCAAAGGCCTGTTCTGA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_003174 unedited  
GTTCACTATTTGTATACGACTCACTATAGCGGGCCGGAATTCGCACGAGGGCATCCTGT  
GCGGGGACCCCGCTCCCGCGCGGTGGGAACGAGCGGGGCGTGGCCGCGCGCTGCTGAG  
AAGTCGGGGCCGCCGAGCCGCTGTCGGCAGGAAGCGGCGATCCTGCCACCGGGAGGTGTG  
GAAGAGCCGGATTCTGGCTACATTGGAGATTGGTTGCTTTCTAAAAGTGAAGGAGAAGCC  
CATGAAGAGATGGTGGATTCTCACTGAGTTTTGACTAGCGGAAGAAAAGAGAGAGTTCAA  
GTGGATGGCCTTGAGGACTTGAAAAGCTGAGATATGATGATTTTGAAGTCATTTACATC  
GAAGCCATGATTTAAATATCGGCGTTAAGATTTCAACAAGAAAACCTTAAGCTTCCTTGG  
ATTTCCACGTCAAAGGAAAGTTTCAAGCTTTACAAGGAGTTCTCACTCGAAGATAAAGA  
ACAGCTCGTAAACCAGAAAGAGGAATCGATGCTCAGCTTTTAGTTGCACTTCCTAAAGT  
TGCAAGAATTAAGACAAATCTTTGAACCAAGAAGAAAGAATTCTTAGAAATGAAAAGAAA  
AGAAAAGATTGCCAGGCGCTGGAAGGGATTGAAAATGACACTCAGCCCATCCTCTTGCA  
GAGCTGCACAGGATTGGTGAATCACCAGCTGCTGGAGGAAGACACCCCTCGATACATGAA  
AGCCAGCGACCCTGCCAGCCCCACATCGGCCGATCCAATGAAGAGGAGGAAACTTCTGA  
TTCTTCTAGAAAAGCAGACTCGATTCAAATACTGCACAGAAACCTTCCGTGTCCACGG  
TGACTCACCTTATGTTTCCGTTCCATGGACCCACAGTCTTGAGTTCAAACCCGAAGCAT  
TGCAAGGTACAAAGCAAAAC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_003174 unedited  
TACTATGGACGCGGCCGAATCTATGATCGGTTTTTTTTTTTTTTTTTTTATTAGAAAATT  
GAGATGTTTTTATTTGACTATTTGAGAGTAAAATTGTAGATAATGTTCCAAACCATCAT  
CAAAAATGCAGAGCAAATTTTCTGTATATAAACTGTACATAAAAAACAAGGCACTATACA  
TTTTTTGGGAGATATTAAGGTAGAAAGTTGATTGCATAGATTCTCCAGAGTCCATGCC  
ATTAAGTACAAATCTTTGTTTATTTAGCACCGGAAGCAGTACTCAGAACAAGTCATAC  
CTAATGCTGCAGGAAACATTTCCAAACGTGATGAAGATACATATTGGTGGCAGAGCTAA  
TTCAACAGAAGCAACTCCATCTACCTTTTCATGTTATTTTGACACCAAAACAAATCTTGA  
AAGTGAATGAATACATATTGCTTTGTTAAATACATATTGACTTATATGGTGTATATA  
AATATATATATATTTAGAAATCCACAACTATCAAAAATACACTTTATAAAGAGAAGTGC  
TTCAAAAAAAAAAAAAAAAAAGGCATTGCCTAGCTGGAACAAGAAGGCAGTGCTATCTATAG  
CAGCTGCGGCTTAAGTGACATAACAGATACTTTTATTAATTCTGATAACCTCCTGAATG  
GTGGAAAGAAGTTTCCAAACAGTTCCCTTGAACATTTACAAAATACAACTCCGGGACA  
AGCAGTATCTTTAACAATGTCAGGTTCTGAAAACCTGATTGAAAATACTTTGTGAAAA  
ACACCAGTCCAAAAATATATCCATTTTCTGGTGCATAGGTGTTGTTGGACGTGACCGT  
GAAGCTCCTCTGGCGTCTCCCACTCAGACAGGCCTTTTGCTTTTCTCAGGTACCTGCTTC  
CAGCGGGCAGGCGTGTATTCATCCTCGTCATGCTATGCAAAATCGAAGCCTCGCCGTGAG  
AAGATCCAGCTC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_003174

**Insert Size:**

6250 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).

**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\\_003174.2](#), [NP\\_003165.1](#)

**RefSeq Size:** 6719 bp

**RefSeq ORF:** 5367 bp

**Locus ID:** 6840

**UniProt ID:** [O95425](#)

**Cytogenetics:** 10p11.23

**Domains:** VHP, GEL, Gelsolin

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a bipartite protein with distinct amino- and carboxy-terminal domains. The amino-terminus contains nuclear localization signals and the carboxy-terminus contains numerous consecutive sequences with extensive similarity to proteins in the gelsolin family of actin-binding proteins, which cap, nucleate, and/or sever actin filaments. The gene product is tightly associated with both actin filaments and plasma membranes, suggesting a role as a high-affinity link between the actin cytoskeleton and the membrane. The encoded protein appears to aid in both myosin II assembly during cell spreading and disassembly of focal adhesions. Several transcript variants encoding different isoforms of supervillin have been described. [provided by RefSeq, Apr 2016]

Transcript Variant: This variant (1) is alternatively spliced in the 5' portion of the gene, resulting in the shorter isoform (1) which has a different amino-terminus compared to isoform 2.