

## Product datasheet for **SC315385**

### Supervillin (SVIL) (NM\_021738) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Supervillin (SVIL) (NM_021738) Human Untagged Clone
Tag:	Tag Free
Symbol:	Supervillin
Synonyms:	MFM10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC315385 representing NM_021738. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAAAAGAAAAGAAAAGAAATTGCCAGGCGCCTGGAAGGGATTGAAAATGACACTCAGCCCATCCTCTTG
CAGAGCTGCACAGGATTGGTGACTACCCGCTGCTGGAGGAAGACACCCCTCGATACATGAGAGCCAGC
GACCCTGCCAGCCCCACATCGGCCGATCAAATGAAGAGGAGGAACTTCTGATTCTTCTAGAAAAG
CAAACCTCGATCCAAACTGCACAGAACTCCGGTGTCCACGGTGACTCACCTATGGTTCGGGTACC
ATGGACACCCACAGTCTGGAGTCAAAGCCGAAAGAATTGCAAGGTACAAAGCAGAAAGAAGGCGACAG
CTGGCAGAGAAGTATGGGCTGACTCTGGATCCCGAGGCCGACTCCGAGTATTTATCCCGTATACCAAG
TCCAGGAAGGAGCCTGATGCTGTGAGAAAGCGGGAGGAAAAAGTGACAAACAGGAAGAGTCAAGCAGA
GATGCTAGTTCTGTACCCCGGACCGAGACGATGGGGCTCAGGACCTGTGCCGGTGAATCCAAGGAC
TATGCCCTCCATGTGGGTGACGGCTCTTCCGACCCGGAGGTGCTGCTGAACATAGAAAACCAAAGACGA
GGTCAAGAGCTGAGTGCCACCCGGCAGGCCATGACCTGTCCCAAGCAGCCGAGAGTTTCTCGACCTTC
TCTTTCTGTTGGGCGAGACTCCTCCTTCACTGAAGTGCCACGGTCCCCAAGCAGCCACAGCTCCTCC
CTGCAGCAGGCAGCCTCCCGAGCCCTCCTTTGGTGACCCACAGCTATCCCTGAGGCCGACCCAGT
ACAGGGAAACCCAAACATGAGTGGTTTCTCCAGAAAGATTCCGAAGGGGACACACCTTCACTTATCAAC
TGGCCTTCCAGAGTTAAAGTTAGAGAAAAATTGGTGAAGAGGAAAGTGCTCGAAACAGCCCTGAACTC
GCCTCAGAGTCCGTAACCTCAGAGGAGACACCAGCCAGCCAGTCCATTACGTGTCAATTCAGTCTGAG
CACTCAGCCTTTGATAGGGTCCCGAGCAAGGCAGCAGGCTCTACACGACAGCCAATCCGTGGCTATGTC
CAACCCGAGATACCGGTACACCCGCAAGCTAGTGACGCCAGAAACCCAGAAAATGCATCTGAGTGT
AGCTGGGTAGCATCAGCCACCCAGAATGTCCCAACCTCCAGCTTGACGGTTCTAGAAGGTGACGGA
AGGGATAGCCAGTTCTCCATGTCTGCGAGTCAAAGCAGAAAGAAGAAGGGGAAGGAGAAGGAGAA
GAAAAAGAAGAAGATGTGTGCTTCACTGAAGCTCTCGAGCAAAGCAAGAAAACCTACTGGCTTTGGAG
GGTGATGGGCTAGTGAGAAGCCAGAAGATCCCTCTAGAAATGAGGACTTTGGTAAGCCTGCTGTGAGC
ACAGTCACCTTAGAGCATCAGAAGGAAGTGGAAAACGTGGCACAACCCCTCAAGCTCCGCACCAGCC
```



[View online >](#)

ACTGAGAGGACAGGCAGGAGCGAGATGGTTCTCTACATTCAAAGTGAGCCTGTGTCCCAAGACGCCAAA  
 CCAACTGGTCACAACAGGGAAGCCTCGAAAAAGCGCAAGGTCCGTACCCGCTCTCTGTGAGATTTACA  
 GGCCCCCTCAGCTCCAGGCCTTGAAGTATAAGGACCCAGCTCCAGGAGAGAGCTGGAGCTGCCAGC  
 TCCAAGACCGAAGGGCCTTATGGGGAGATCAGCATGCTGGACACAAAAGTCTCTGTGCCCCAGCTCCGA  
 AGTGCCTTCTGGCATCTGCCAACGCCTGCAGGAGACCTGAACTCAAATCACGGGTGGAGAGGTCCGGCT  
 GAAGGACCTGGCTTGCCACCCGGTGTGGAACGGGAGAGAGGGTCCCGGAAACCAAGACGCATTTTTCT  
 CCTGGTGAAGTAGAAAAACTTCGAGAGATTTAGAACCAACCTATAACTTCAGCAGAACGAAAGGAA  
 TCGGATAGGTGCACTTCACATTACAGAAACGCCAACTGTCGATGATGAAGAAAAGGTGGATGAACGAGCC  
 AAGCTGAGCGTCGCCCAAGAGTTGCTTTTCAGGGAGATGGAAAAATCTTTTGATGAACAAAATGTT  
 CCAAAGCGACGCTCAAGAAACACAGCTGTGGAGCAGAGGCTACGCCGTCTGCAGGACAGGTCCCTCACC  
 CAGCCCATCACCCTGAAGAGGTGGTATCGCAGCCACTGAACTATCCCCGCTTCGTGTTCTGGGGGC  
 ACCCACCTGTAATGGCGAGACTTCTAGCCCCACTGTAGCTAGGAGCGCTGTGCAGCCTGCCAGATTG  
 CAGGCCTCTGCTACCAAAGGCCTTAGCCAAGGACCAGACAAATGAGGGCAAAGAGCTTGTGAGCAA  
 GGAGAACCTGATTCCTCCACTTAAGCTTGCCGAAAAGTTGGCCTTGTTTAAACAAATTGCCAGCCA  
 GTCTCAAAGCGATTTCTACCCGGAACAGAATAGACACGAGACAGAGGAGAATGAACGCTCGCTATCAA  
 ACTCAGCCAGTCACACTGGGAGAGGTGGAGCAGGTGCAGAGTGGAAAAGCTCATTCCTTTCTCACCTGCC  
 GTGAACACATCAGTGTCTACCGTAGCATCCACGGTTGCTCCAATGTATGCCGGAGATCTTCGCACAAAG  
 CCACCTCTTGACCACAATGCAAGTGCCACTGACTATAAGTTTTCTTCAATAGAAAATTCGGACTCT  
 CCAGTTAGAAGCATTCTGAAATCGCAAGCTTGGCAGCCTTTGGTAGAGGGTAGCGAGAACAAGGGAATG  
 TTGAGAGAATATGGAGAGACAGAAAGCAAGAGAGCTTTGACAGGTCGAGACAGTGGGATGGAGAAGTAT  
 GGGTCCCTTTGAGGAAGCAGAAGCATCCTACCCATCCTGAACCGAGCCAGGAAGGAGACAGCCATAAG  
 GAATCTAAATATGCTGTTCCAGAAGAGGAAGCCTGGAACGGGCGAACCCCTCCATCACCCACCTCGGG  
 GATGAAACCGAAGGAATTTCCATGGCTAAAATGAATGCACAAGGAAACTTGGACTTGAGGGACAGCTG  
 CCCTTTGAAGAGAAGGTGGAGGTGGAGAATGTTATGAAAAGGAAGTTTTACTAAGAGCGGCAGAGTTC  
 GGGGAGCCCACTTCGAGCAGACGGGACAGCTGCTGGGAAAATATTGCTCAAACACAGCCCCCGTG  
 TCCTGGAAGCCCCAGGATTCTCGGAACAGCCACAGGAGAAGCTCTGCAAGAATCCATGTGCGATGTTT  
 GCTGCTGGAGAGATCAAAACGCCGACAGGGGAGGGCCTTCTTGACTCACCCAGCAAAACCATGTCTATT  
 AAAGAAAGATTGGCACTGTTGAAGAAAAGCGGGGAGGAAGATTGGAGAAACAGACTCAGCAGGAGGCAG  
 GAGGGCGCAAGGCGCCGCCAGCAGCCTGCACACCCAGGAAGCAGGGCGGTCCCTCATCAAGAAGCGG  
 GTCACAGAAAGTCGAGAGAGCCAAATGACGATTGAGGAGAGGAAGCAGCTCATCACTGTGAGAGAGGAG  
 GCCTGGAAGACGAGAGGCAGAGGAGCGGCAACGACTCGACCCAGTTCCTGTGGCTGGCAGGATGGTG  
 AAGAAAAGTTTGGCGTCACCTACTGCCATAAACCAGTAGCCTCACCCATTTGCGGTAAAACAAGAGGC  
 ACCACACCCGTTTCAAACCCCTGGAAGATATCGAAGCCAGACCAGATATGCAGTTAGAATCGGACCTG  
 AAGTTGGACAGGCTGAAACCTTTCTAAGAAGGCTGAATAACAAAGTTGGCGGGATGCACGAAACGGTG  
 CTCACTGTACCCGCAAACTCTGTGAAGGAGGTGATGAAGCCAGATGATGATGAAACCTTTGCCAAATTT  
 TACCGCAGCGTGGATTATAATATGCCAAGAAGTCTGTGGAGATGGATGAGGACTTCGATGTCAATTTT  
 GATCCTTATGCACCCAAATTGACGTCTTCCGTGGCCGAGCACAAGCGGGCAGTTAGGCCAAAGCGCCG  
 GTTCAGGCCTCCAAAACCCCTGAAAAATGCTGGCGGCAAGAGAAGATCTCCTTCAGGAATACACTGAG  
 CAGAGATTAACGTTGCCTTCATGGAGTCAAAGCGGATGAAAGTAGAAAAGATGTCTTCCAACCTCAAC  
 TTCTCAGAAGTACCCTGGCGGGTTTAGCCAGTAAAGAAAACCTCAGCAACGTCAGCCTGGCGAGCGTC  
 AACCTGACGGAACAGAATCTAACAACAGCGCCGTGCCCTACAAGAGGCTGATGCTGTTGCAGATTA  
 GGAAGAAGACATGTGCAGACCAGGCTGGTGAACCTCGAGCTTCGGCGCTCAACAGTGGGGACTGCTTC  
 CTCCTGCTCTCTCCCACTGCTGCTTCTGTGGGTAGGAGAGTTTCAAACGTCATAGAAAAGGCGAAG  
 GCCTCAGAACTTGCAACTTAATTCAGACAAAGAGGGAACCTGGTTGTAGAGCTACTTATCCAAACC  
 ATTGAAGAAGGAATTAATACACACTCATGCAGCCAAAGACTTCTGGAAGCTTCTGGGTGGCCAAACC  
 AGTTACCAATCTGCTGGAGACCCAAAAGAAGTGAAGTCTATGAAGCAGCCATAATAGAACTAAGTGC  
 ATTTACCGTCTCATGGATGACAACTTGTCTCTGATGACGACTACTGGGGAAAAATCCGAAGTGTCTC  
 CTCTGCAACCCAAAGAGGTACTGGTGTGTTGATTTGGTAGTGAAGTTTACGTATGGCATGGGAAAGAA  
 GTCACATTAGCACAACGAAAAATAGCATTTAGCTGGCAAAGCACTTATGGAATGGAACCTTTGACTAT  
 GAGAACTGTGACATCAATCCCCTGGATCCTGGAGAATGCAATCCGCTTATCCCCAGAAAAGGACAGGGG  
 CGGCCCGACTGGGCGATATTTGGGAGACTTACTGAACACAATGAGACGATTTTGTCAAAGAGAAGTTT  
 CTGATTGGACGGAACCTGAAGAGATCGAATGAGAAGAACCCCGGGGAACCTGCCAGCACAAGGAAGAC

```

CCCAGGACTGATGTCAAGGCATACGATGTGACACGGATGGTGTCCATGCCCCAGACGACAGCAGGCACC
ATCCTGGACGGAGTGAACGTGCGCCGTGGCTATGGCCTGGTGAAGGACACGACAGGAGGCAGTTTGGAG
ATCACCAGCGTTTCCGTGGATGTCTGGCACATCCTGGAATTCGACTATAGCAGGCTCCCCAAACAAAGC
ATCGGGCAGTTCCATGAGGGGGATGCCTATGTGGTCAAGTGAAGTTCATGGTGAGCACGGCAGTGGGA
AGTCGCCAGAAGGGAGAGCACTCGGTGAGGGCAGCCGGCAAAGAGAAGTGCCTACTTCTTCTGGCAA
GGCCGGCACTCCACCGTGAGTGAGAAGGGCAGCTCGGCGCTGATGACGGTGGAGCTGGACGAGGAAAGG
GGGGCCAGGTCAGGTTCTCCAGGAAAGGAGCCCCCTGTTTCTGCAGTGTTCAGGGGGGGATG
GTGGTGCACCTCGGGGAGCGGGAAGAGGAAGAAGAAAATGTCAAAGTGAGTGGCGGCTGTACTGGGTG
CGTGGAGAGGTGCCCGTGAAGGGAATTTGCTGGAAGTGGCTGTCACTGTAGCAGCCTGAGGTCCAGA
ACTTCCATGGTGGTGCTAACGTCAACAAGGCCCTCATCTACCTGTGGCACGGATGCAAAGCCCAGGCC
CACACGAAGGAGGTGCGAAGGACCGCTGCGAACAGATCAAGGAACAATGTCCCCTGGAAGCAGGACTG
CATAGTAGCAGCAAAGTACAATACACGAGTGTGATGAAGGCTCCGAGCCACTCGGATTCTGGGATGCC
TTAGGAAGGAGAGACAGGAAAGCCTACGATTGCATGCTTCAAGATCCTGGAAGTTTTAACTTCGCGCCC
CGCCTGTTTCATCCTCAGCAGCTCCTCTGGGGATTTTGCAGCCACAGAGTTTGTGTACCCTGCCGAGCC
CCCTCTGTGGTCAGTTCATGCCCTTCTGCAGGAAGATCTGTACAGCGGCCCCAGCCAGCACTTTTC
CTTGTTGACAATCACCAGGAGGTACCTCTGGCAAGGCTGGTGGCCATCGAGAACAAGATCACTGGT
TCCGCCCGCATCCGCTGGGCCTCCGACCGAAGAGTGCATGGAGACTGTGCTCCAGTACTGCAAAGGA
AAAAATCTCAAGAAACCAGCCCCAAGTCTTACCTTATCCACGCTGGTCTGGAGCCCCTGACATTACC
AATATGTTTTCCAGCTGGGAGCACAGAGAGGACATCGCTGAGATCACAGAGATGGACACGGAAAGTTTCC
AATCAGATCACCTCGTGAAGACGTCTTAGCCAAAGCTCTGTAACCATTACCCGCTGGCCGACCTC
CTGGCCAGGCCACTCCCGGAGGGGGTGCATCCTCTGAGCTTGAGATCTATCTCACCGACGAAGACTTC
GAGTTTGCCTAGACATGACGAGGGATGAATAACAACGCCCTGCCGCTGGAAGCAGGTGAACCTGAAG
AAAGCAAAGGCCTGTTCTGA
ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
    
```

<b>Restriction Sites:</b>	SgfI-MluI
<b>ACCN:</b>	NM_021738
<b>Insert Size:</b>	6645 bp
<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>OTI Annotation:</b>	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.
<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>	<u><a href="#">NM_021738.2</a></u>

RefSeq Size: 8306 bp

RefSeq ORF: 6645 bp

Locus ID: 6840

UniProt ID: [O95425](#)

Cytogenetics: 10p11.23

Domains: VHP, GEL, Gelsolin

Protein Families: Druggable Genome

MW: 247.7 kDa

**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 (2) is alternatively spliced in the 5' portion of the gene, resulting in the longer, muscle-specific isoform (2) which has a different amino-terminus compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript that matched the reference genome was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.