

## Product datasheet for **SC109769**

### Smoothelin (SMTN) (NM\_134269) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Smoothelin (SMTN) (NM_134269) Human Untagged Clone
Tag:	Tag Free
Symbol:	Smoothelin
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_134269, the custom clone sequence may differ by one or more nucleotides

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ATGGCGGACGAGGCCCTTAGCTGGGCTGGATGAGGGAGCCCTTCGGAAGCTGCTGGAGGTCACAGCAGATC
TGGCAGAGCGGGCGCATCCGCTCAGCCATCCGGGAAGTGCAGCGGCAGGAGCTGGAGCGGAGGAGGA
GGCCCTGGCATCCAAGCGTTTCCGTGCCGAGCGCAGGACAACAAGGAGAAGTGGCTGCACTCTCAGCAG
CGGAAGCTGAGCAGCGGCTGCCCTGGCACGGCTGGCAGGGCAGCTGGAGTCCATGAACGATGTGGAGG
AATTGACTGCACTGTTGCGAAGCGCTGGTGAATGAGGAGCGCAAGCTGATCCGAGCTGCCATCCGCCG
TGTACGGGCTCAGGAGATTGAGGCTGCCACCTTGCTGGGAGGTTGTACAGCGGGCGTCCCAACAGTGGC
TCAAGAGAGGACAGCAAGGGGCTAGCGGCACACAGGCTGGAACAGTGTGAGGTGCCAGAGCGAGAGGAAC
AGGAACAGCAGGCAGAGGTTTCAAAGCCAACCCCCACCCCTGAAGGCACCAGCCAGGATGTGACCACAGT
GACTCTCTGCTGCGAGCCCCACCTGGGAGCACATCCAGCTCACCTGCCTCACCCAGCAGTTCACCCACC
CCTGCCTCTCTGAGCCTCCATTGGAGCCTGCCGAGGCCAGTGCCTTACAGCTGAGGTTCCAGGCAGCC
CAGAGCCACCCCCAGCCACCCAAGACCACCAGCCCTGAGCCTCAGGAGTCTCCAACGCTCCCCAGCAC
TGAGGGCCAGGTGGTCAACAAGCTTCTGTCTGGCCCCAAAGAGACCCCTGCTGCCAGAGCCCCACCAGA
GGCCCCCTGTGACACCAAGAGAGCAGACGTGGCTGGACCCCGACCCCTGCCAACGCTCCCTGTCCGTGCTCA
GCCCCCGCAACCAGCCAGAACCAGAGTCCACCCCTTGCCAGCGGACCTTCTCTATTCCAGCGGGC
TGGCTCTGTGCGGGATCGTGTCCACAAGTTCACATCTGATTCTCTATGGCTGCTAGGCTCCAGGATGGC
ACACCCAGGCTGCCCTAAGTCCCCTGACCCCGCAAGGCTCTGGGCCCTCCCTCACCAGCACCACCC
CTGCCTCTCTCCAGCGGCTCTCTCTCGGGGGCCAGTGATACCTCTCCCGTTTCAGCAAGGAGCA
ACGAGGAGTAGCCAGCCCTGGCCAGCTTGAAGCTGCCCCAGGAGGAGGGCCAGGGGGCGGGC
TTGGCTGCTAGGCCCTTGAAAACAGAGCAGGGGGCTGTGGCACGTTTCAGAGGAGCCTGGTGCCCGC
TGCCCGTGGCCGTCGGCACTGCCGAGCCAGGGGGCAGTATGAAGACCACATTCACCATCGAGATCAAGGA
CGCCCGTGGCCAGGCTCCACAGCCGGGTGCTGCTGCCACAGGCAACCAGAGGCGAGAAGTACACTG
GGGCTGCGGGCGCCCCGACCCTACTCAGCACCAGTAGTGGGGCAAGAGCACCATCACCCGTGTCAACA
GCCCTGGGACCCTGGCTCGGCTGGGAGTGTCACTCATGTACCAGCTTCAGCCATGCCCCCCCCAGTAG
CCGAGGAGGCTGCAGCATCAAGATGGAAGCAGAGCCAGCAGACCTCTGCTGCAGCAGTGAAGCGGCC
AATGGGGCTGAGCAGACCCGAGTGAACAAAGCACCAGAAGGGCGGAGCCCTCTGAGCGCTGAGGAGCTGA
TGACTATTGAGGATGAAGGAGTCTTGACAAGATGCTGGATCAGAGCACGGACTTTGAAGAGCGGAAGCT
CATCCGGGCTGCACTTCGTGAGCTCCGACAAGGAAGAGAGACCAGCGGACAAGGAGCGGGAACGGCGG
CTGCAGGAGGCACGGGGCCGGCCAGGGGAGGGGCGGGCAACACAGCCACTGAGACCACCAGGAGCACA
GCCAGCGGGCAGCTGATGGCTCTGCTGTGCACTGTTACCAAGACTGAGCGGCTCGTCCACTCCAATGA
TGGCACACGGACGGCCCGCACCACCACAGTGGAGTCGAGTTTCGTGAGGCGCTCGGAGAATGGCAGTGGC
AGCACCATGATGCAAAACCAAGACCTTCTCTTCTCTCTCATCAAGAAGATGGGCAGCATCTTCGACC
GCGAGGACCAGGCCAGCCACGGGCCGGCAGCCTGGCGGCGCTCGAGAAACGGCAGGCCGAGAAGAAGAA
AGAGCTGATGAAGGCGCAGAGTGTGCCAAGACCTCAGCCTCCCAGGCGCGCAAGGCCATGATTGAGAAG
CTGGGAAAGGAGGGCGCGCCGGCAGCCCTGGCGGACCCCGCGCAGCCGTGCAGCGATCCACCAGCTTCG
GGTCCCCAACGCCAACAGCATCAAGCAGATGCTGGACTGGTGTGAGCCAAAGACTCGCGGCTACGA
GCAGCTGACATCCAGAACTTCTCTCCAGCTGGAGTGTGGATGGCCTTCTGTGCCCTGTGCAACAAC
TTCTTCCCTGAGGCCCTCGACTATGGGAGCTTAGCCCTCAGAACCAGCCAGCAACTTCAGGTTGGCCT
TCTCATCTGCGGAGACCATGCGGACTGCCCGAGCTCCTGGATACAGAGGACATGGTGGGCTTCGAGA
GCCTGACTGGAAGTGCCTGTACAGTACATCCAGGAATTCTACCGCTGTCTGGTCCAGAAGGGGCTGGTA
AAAACCAAAAAGTCCTAA
```

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_134269 unedited  
 TCGAAATATGTAATACGACTCACTTATAGGGCGGCCGATTTCGGCACCAGGCTGCCCGT  
 GGCCGTCGGCACTGCCGAGCCAGGGGCGAGTGAAGACCACATTCACCATCGAGATCAA  
 GGACGGCCGTGGCCAGGCTCCACAGGCCGGTGTCTGCTGCCACAGGCAACCAGAGGGC  
 AGAACTGACACTGGGGCTGCGGGCGCCCCGACCTACTCAGCACCAGTGTGGGGCAA  
 GAGCACCATCACCCGTGTCAACAGCCCTGGGACCCTGGCTCGGCTGGGCAGTGTCACTCA  
 TGTCAACAGCTTCAGCCATGCCCCCCCAGTAGCCGAGGAGGCTGCAGCATCAAGATGGA  
 AGCAGAGCCAGCAGAGCCCTCTCGCTGCAGCAGTGAAGCGGCCAATGGGGCTGAGCAGAC  
 CCGAGTGAACAAAGCACCAGAAGGGCGGAGCCCTCTGAGCGCTGAGGAGCTGATGACTAT  
 TGAGGATGAAGGAGTCTTGACAAGATGCTGGATCAGAGCACGGACTTTGAAGAGCGGAA  
 GCTCATCCGGGCTGCACTTCGTGAGCTCCGACAAAGGAAGAGAGACCAGCGGGACAAGGA  
 GCGGGAACGGCGGCTGCAGGAGGCACGGGGCCCGCCAGGGGAGGGGCGCGGGCACACAG  
 CCACTGAGACCACCAGGACAGCCAGCGGGCAGCTGATGGCTCTGCTGTGAGCACTG  
 TTACCAAGACTGAGCGGCTCGTCCACTCCAATGATGGCACACGGACGGCCNGCACCACCA  
 CAGTGGAGTCGAGTTTCGTGAGGCGCTCGGAGAATGCCAGTGGCAGCACCATGATGCCAA  
 CCAAGACCTTNCCTCTTCTCCTNCTCATNCAAGAAGATGGGCAGCATCTTCGACCCGAGG  
 ACAGGCCAGCCCAGNCCGGCAGCCTGGCGGCGCTCGAGAAACGCAGCCCGAAANAAAAA  
 GAGCTGATGAAGCGCAAN

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_134269 unedited  
 NTTGCTCTGGACCGCGGNNCCGCATNCTAGNGATCGAGTTTTTTTTTTTTTTTTTTTTTTT  
 TTTTTTCGGGAAAACCAATAATTTATCAAACCCTGCGTGTGTATGTGGGGGGAGGGT  
 GTCCCAACAAACAGGGCAGCGGTGGGCGGACCCACAGGCAGGAAACGGTGCCTCGGAAAGT  
 GGGGGCGCAGCTTGCCACTGGCTGGCCATGCGGGCGGGCAGGCTAAACATTTCTGCCGC  
 GCAGGCGCAGTTCGTGGCGTGCAGGTGGTTGTAAGCGACTGCACATAGGTGAAGACAC  
 ACTTGGGGTCAGGCTTCTTGCCCATGATCATCATGTGTCACCTCCACCAGGGGCACAC  
 AGTCCACCAGCATCTCCGAGATGAAAAGGCCACCTCGAAGTTCTGGCGTCGGTTCTGAG  
 GGCTAACCTGCCCATAGTCGAAGCCTCAGGGAAAAAGTTGTGCACCAGGGCCAGAAAG  
 CCATCCCATCACTCCAAGTGGAGGAACAATCCTGGCTCCCCCTCCTCGCACCCCGGATT  
 TTTGGTTGACCCCAATCCCCCACTGCTTGCACCTGTACCCTTGGCCCCCACAAC  
 CTCGCTGTCTTCCCCGCCCCCGGTCCCTCCGCGGTTCTTCCCCCTCCCCCTCCCC  
 CCGCTCGCTGTGTTCCCCCCTCTCTCTCCTTACCCGCGCTTATCCTCCTCTCTCC  
 TTCGCCCCCTGCTTTTTTCCCTCTTCCCCTCCTTCTCGTTTTTTTGCCTCCCTGT  
 CTTCCCTCGCTCGCTCCCTGTGCCCTCATTTTTCCCCGCCCCCTTAATCCCTCNCTT  
 TTTTATCCCTCCTCGCTCCTTCCCCCTCGTATCCTCCTCCTCACCTCCCCCTCTCC  
 TCCTTTCGCCCTCGGTTATCCCTCTTCGACCGTACACG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_134269

**Insert Size:**

1600 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\\_134269.1](#), [NP\\_599031.1](#)

**RefSeq Size:** 3294 bp

**RefSeq ORF:** 2748 bp

**Locus ID:** 6525

**UniProt ID:** [P53814](#)

**Cytogenetics:** 22q12.2

**Domains:** CH

**Gene Summary:** This gene encodes a structural protein that is found exclusively in contractile smooth muscle cells. It associates with stress fibers and constitutes part of the cytoskeleton. This gene is localized to chromosome 22q12.3, distal to the TUPLE1 locus and outside the DiGeorge syndrome deletion. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, May 2011]  
Transcript Variant: This variant (2) has an alternate 5' exon, which results in a downstream AUG start codon, lacks an in-frame exon in the middle region and has an additional exon in the 3' region, compared to variant 4. The resulting isoform (b, also referred to as L2 and B2) is shorter at the N-terminus, lacks a segment in the middle region and has a slightly shorter and distinct C-terminus, compared to isoform d.