

## Product datasheet for **SC321392**

### SM22 alpha (TAGLN) (NM\_001001522) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SM22 alpha (TAGLN) (NM_001001522) Human Untagged Clone
Tag:	Tag Free
Symbol:	SM22 alpha
Synonyms:	SM22; SM22-alpha; SMCC; TAGLN1; WS3-10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_001001522.1  
CAAGTCTTCACTCCTTCTGCGAGCCCTGAGGAAGCCTTGTGAGTGCATTGGCTGGGGCT  
TGGAGGGAAGTTGGGCTGGAGCTGGACAGGAGCAGTGGGTGCATTTTCAGGCAGGCTCTCC  
TGAGGTCCCAGGCGCCAGCTCCAGCTCCCTGGCTAGGGAAACCCACCCTCTCAGTCAGCA  
TGGGGGCCCAAGCTCCAGGCAGGGTGGGCTGGATCACTAGCGTCTGGATCTCTCTCAGA  
CTGGGCAGCCCCGGGCTCATTGAAATGCCCGGATGACTTGGCTAGTGCAGAGGAATTGA  
TGGAAACCACCGGGGTGAGAGGGAGGCTCCCCATCTCAGCCAGCCACATCCACAAGGTGT  
GTGTAAGGGTGCAGGCGCCGGCTTAGGCCAAGGCTCTACTGTCTGTTGCCCTCCAG  
GAGAACTCCAAGGAGCTTTCCCAGACATGGCCAACAAGGGTCTTCTATGGCATGAG  
CCGCGAAGTGCAGTCCAAAATCGAGAAGAAGTATGACGAGGAGCTGGAGGAGCGGCTGGT  
GGAGTGGATCATAGTGCAGTGTGGCCCTGATGTGGCCGCCAGACCGTGGGCGCTTGGG  
CTTCCAGGTCTGGCTGAAGAATGGCGTGATTCTGAGCAAGCTGGTGAACAGCCTGTACCC  
TGATGGCTCCAAGCCGGTGAAGGTGCCCGAGAACCACCCTCCATGGTCTTCAAGCAGAT  
GGAGCAGGTGGCTCAGTTCCTGAAGCGGCTGAGGACTATGGGGTTCATCAAGACTGACAT  
GTTCCAGACTGTTGACCTCTTTGAAGGCAAGACATGGCAGCAGTGCAGAGGACCCTGAT  
GGCTTTGGGCAGCTTGGCAGTGACCAAGAATGATGGGCACTACCGTGGAGATCCCAACTG  
GTTTATGAAGAAAGCGCAGGAGCATAAGAGGGAATTCACAGAGAGCCAGCTGCAGGAGGG  
AAAGCATGTTCATTGGCCTTCAGATGGGCAGCAACAGAGGGGCTCCCAGGCCGCGCATGAC  
AGGTACGGACGACCTCGGCAGATCATCAGTTAGAGCGGAGAGGGCTAGCCCTGAGCCCG  
GCCTCCCCCAGTCTCTTGGCTGCAGCCATCCCGCTTAGCCTGCCTCACCCACACCCGTTG  
TGTACCTTCAGCCCTGGCCAAGCTTTGAGGCTCTGTCACTGAGCAATGGTAACTGCACC  
TGGGCAGTCTCTCCCTGTGCCCCAGCCTCAGCCCAACTTCTTACCCGAAAGCATCACTG  
CCTTGGCCCTCCCTCCCGGCTGCCCCATCACCTCTACTGTCTCCTCCCTGGGCTAAGC  
AGGGGAGAAGCGGGCTGGGGGTAGCCTGGATGTGGCCAAGTCCACTGTCCTCCTTGGCG  
GCAAAAGCCATTGAAGAAGAACCAGCCAGCCTGCCCTATCTGTCTGGAATATTT  
TTGGGGTTGGAACCAAAAAAAAAAAAAAAAAAAAAAAAAA



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<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_001001522
<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_001001522.1</a></u> , <u><a href="#">NP_001001522.1</a></u>
<b>RefSeq Size:</b>	1574 bp
<b>RefSeq ORF:</b>	606 bp
<b>Locus ID:</b>	6876
<b>UniProt ID:</b>	<u><a href="#">Q01995</a></u>
<b>Cytogenetics:</b>	11q23.3

**Gene Summary:**

This gene encodes a shape change and transformation sensitive actin-binding protein which belongs to the calponin family. It is ubiquitously expressed in vascular and visceral smooth muscle, and is an early marker of smooth muscle differentiation. The encoded protein is thought to be involved in calcium-independent smooth muscle contraction. It acts as a tumor suppressor, and the loss of its expression is an early event in cell transformation and the development of some tumors, coinciding with cellular plasticity. The encoded protein has a domain architecture consisting of an N-terminal calponin homology (CH) domain and a C-terminal calponin-like (CLIK) domain. Mice with a knockout of the orthologous gene are viable and fertile but their vascular smooth muscle cells exhibit alterations in the distribution of the actin filament and changes in cytoskeletal organization. [provided by RefSeq, Aug 2017]

Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 both encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.