

## Product datasheet for SC118136

### Stromal interaction molecule 1 (STIM1) (NM\_003156) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Stromal interaction molecule 1 (STIM1) (NM_003156) Human Untagged Clone
Tag:	Tag Free
Symbol:	Stromal interaction molecule 1
Synonyms:	D11S4896E; GOK; IMD10; STRMK; TAM; TAM1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_003156 edited  
 GAATTCGGCAGGCTTGCTGGAGACCGTCGGCTGCACTCCCGGGCTCCTGGCTTTCCTCTGGGATC  
 CCGAGGTGCCACATCAGACGCATGTTGACTGAGACCTAGAGTCATGGATGTATGCGTCCGTCCTGGCCCT  
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 GGAACCGCTCGGGGGCCAACTCTGAGGAGTCCACTGCAGCAGAGTTTTGCCGAATTGACAAGCCCTGT  
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 GTGAAACACAGCACCTTCCATGGTGAGGATAAGCTCATCAGCGTGGAGGACCTGTGGAAGGCATGGAAGT  
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 TATCGTTATTGGTGTGGGCGGCTGCTGGTTTGCCTATATCCAGAACCCTTACTCCAAGGAGCACATGAAG  
 AAGATGATGAAGGACTTGGAGGGGTACACCGAGCTGAGCAGAGTCTGCATGACCTTCAGGAAAGGCTGC  
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 TCCTCCCTCCACATGAGTGACCGCCAGCGTGTGGCCCCAAACCTCCTCAGATGAGCCGTGCTGCAGACG  
 AGGCTCTCAATGCCATGACTTCCAATGGCAGCCACCGGCTGATCGAGGGGTCCACCCAGGGTCTCTGGT



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GGAGAACTGCCTGACAGCCCTGCCCTGGCCAAGAAGGCATTACTGGCGCTGAACCATGGGCTGGACAAG
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CTGGACACCCTCAATGGGGTTTTCTGTGTTATTTTCAAAAATCTTTGAAGTCCATAAAGCATGTAGG
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**5' Read Nucleotide Sequence:**

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>OriGene 5' read for NM_003156 unedited
NNGGGGTTACATTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGGCTTGC
CTGGAGACCGTCGGCTGCCTCCCGGGCTCCTGGCTTTGCCTCTGGGATCCCGAGGTGTC
CACATCAGACGCATGTTGACTGAGACCTAGAGTCATGGATGTATGCGTCCGTCTTGCCCT
GTGGCTCCTCTGGGGACTCCTCCTGCACCAAGGCCAGAGCCTCAGCCATAGTCACAGTGA
GAAGGCGACAGGAACAGCTCGGGGGCCAACTCTGAGGAGTCCACTGCAGCAGAGTTTTG
CCGAATTGACAAGCCCCTGTGTACAGTGAGGATGAGAACTCAGCTTCGAGGCAGTCCG
TAACATCCACAACTGATGGACGATGATGCCAATGGTGTGTGGATGTGGAAGAAAGTGA
TGAGTTCTGAGGGAAGACCTCAATTACCATGACCCAACAGTAAAACACAGCACCTTCCA
TGGTGAGGATAAGCTCATCAGCGTGGAGGACCTGTGGAAGGCATGGAAGTCATCAGAAGT
ATACAATTGGACCGTGGATGAGGTGGTACAGTGGCTGATCACATATGTGGAGCTGCCTCA
GTATGAGGAGACCTTCCGGAAGCTGCAGCTCAGTGGCCATGCCATGCCAAGGCTGGCTGT
CACCAACACCACCATGACAGGGACTGTGCTGAAGATGACAGACCCGAGTCATCGGCAGAA
GCTGCAGCTGANAGCTCTGGATACAGTGCTCTNTGGGCTNCTCTTTGACTCGCCATAA
TCACCTCAAGGACTTCATGCTGGNNTGGTGTCTATCGTTATTGGGTGTGGGCCGCTGCTT
GGTTTGCCTATATCCAGAACCCTTACTNCCAGGAGCACATGAANAATAATGATGAAGGACT
TTGGAGGGNTACACCGAGCTA
    
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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_003156 unedited ACTATGGAACCGCGGCCGAATCTAGGATCGAGTT TTTAAATCTCCTACATGCTTTATTGGACTTCAAAAAATTTATGAAATAACACAGAAAA ACCCCATTTGAGGGTGTCCAGGGAGTACAAGGCAGTCTGCAGCCTAGCACCCCTCCTAAGA CCAGCCCCAGGTATACCCACCCAGGCCAAAAATAGGATCCCAGGATAAAGGTATGGCAG GGAGTGGGGCAGAGGAAAAATACCTTTACAGCCATAGCAAAAAACAGGTAAGGGAGAGAGT TGTCTAAAGGGTGGGAAGGGTGGGGGAAAAGTGGTCACACAGCCGCTTACCTATACCAT CTTCCTTAGCCACCCTTCCCAAACTGTTGTGTCCTTTTTGAGCCTCTGGCCAAGGCT ACAAAGTAACATGAAAATGGGATCTAACAGGGGAATATGCAGCGTAGGCACTTGGGAAA TTCAGATTACTTTTTTCTTTTAACTGTTTGTCTTTTGGTTCAAAAAATGACAGCATC CTTGCCCAACAACTCCAGGGCTCCATAAGAGCCCTGTATCATGGCTGTGGCTCTCCTGGC CAGGGGAGCCACTTGTCTGAGCCCTAGGAGTATTGATGCTTGGGGAGCTTTGGGGCAGC ACCTCTTAGAGAAAATCCTCTGCAGTGTGGGGAGCAGGGGTAANAAGGAGGCAGGTGT GGGTGGGAGTANAAGAAAAAGTACTGCCTTATAACCTACAGTTCTGGCATCCACTCAT GCTCCAATGAACAAGATGCCTCTCCAACCCATTTCCAAGCCTGGCCTTTCTTTAAAGTC TCTGGTGGGGTGTCTCTGAAAAATGGTTTCACCTCCCATGGATCCCTGGAAAGGCTGAA TGAAAAATAAGAGGAGGCTCCTTCTGACCCCATCAATCCAAGACAACCTTCAAAAAATAGG CCCTAGCC
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_003156
<b>Insert Size:</b>	4000 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a></p>
<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="#">NM_003156.2</a> , <a href="#">NP_003147.2</a>

RefSeq Size: 4039 bp

RefSeq ORF: 2058 bp

Locus ID: 6786

UniProt ID: [Q13586](#)

Cytogenetics: 11p15.4

Protein Families: Transmembrane

**Gene Summary:** This gene encodes a type 1 transmembrane protein that mediates Ca<sup>2+</sup> influx after depletion of intracellular Ca<sup>2+</sup> stores by gating of store-operated Ca<sup>2+</sup> influx channels (SOCs). It is one of several genes located in the imprinted gene domain of 11p15.5, an important tumor-suppressor gene region. Alterations in this region have been associated with the Beckwith-Wiedemann syndrome, Wilms tumor, rhabdomyosarcoma, adrenocortical carcinoma, and lung, ovarian, and breast cancer. This gene may play a role in malignancies and disease that involve this region, as well as early hematopoiesis, by mediating attachment to stromal cells. Mutations in this gene are associated with fatal classic Kaposi sarcoma, immunodeficiency due to defects in store-operated calcium entry (SOCE) in fibroblasts, ectodermal dysplasia and tubular aggregate myopathy. This gene is oriented in a head-to-tail configuration with the ribonucleotide reductase 1 gene (RRM1), with the 3' end of this gene situated 1.6 kb from the 5' end of the RRM1 gene. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, May 2013]

Transcript Variant: This variant (2, also known as STIM1S) uses an alternate in-frame splice site in the 3' coding region, compared to variant 1. This results in a shorter protein (isoform 2), compared to isoform 1.