

## Product datasheet for **RC205678**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Stromal interaction molecule 1 (STIM1) (NM_003156) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Stromal interaction molecule 1
Synonyms:	D11S4896E; GOK; IMD10; STRMK; TAM; TAM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide  
Sequence:**

>RC205678 representing NM\_003156  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGATGTATGCGTCCGTCTTGCCCTGTGGCTCCTCTGGGACTCCTCCTGCACCAGGGCCAGAGCCTCA  
 GCCATAGTCACAGTGAGAAGGCGACAGGAACCAGCTCGGGGGCCAACTCTGAGGAGTCCACTGCAGCAGA  
 GTTTTGCCGAATTGACAAGCCCTGTGTACAGTGAGGATGAGAACTCAGCTTCGAGGCAGTCCGTAAC  
 ATCCACAACTGATGGACGATGATGCCAATGGTGTGTGGATGTGGAAGAAAGTATGAGTTCCTGAGGG  
 AAGACCTCAATTACCATGACCCAACAGTAAACACAGCACCTTCCATGGTGAAGTAAAGCTCATCAGCGT  
 GGAGGACCTGTGGAAGGCATGGAAGTATCAGAAGTATACAATTGGACCGTGGATGAGGTGGTACAGTGG  
 CTGATCACATATGTGGAGCTGCCTCAGTATGAGGAGACCTTCCGAAGCTGCAGCTCAGTGGCCATGCCA  
 TGCCAAGGCTGGCTGTCACCAACACCACCATGACAGGGACTGTGCTGAAGATGACAGACCGGAGTATCG  
 GCAGAAGCTGCAGCTGAAGGCTCTGGATACAGTGTCTTTGGGCCTCCTCTTTGACTCGCCATAATCAC  
 CTCAAGGACTTCATGCTGGTGGTGTCTATCGTTATTGGTGTGGCGGCTGCTGGTTTGCCTATATCCAGA  
 ACCGTTACTCCAAGGAGCACATGAAGAAGATGATGAAGGACTTGGAGGGTTACACCGAGCTGAGCAGAG  
 TCTGCATGACCTTCAGGAAAGGCTGCACAAGGCCAGGAGGAGCACCGCACAGTGGAGGTGGAGAAGGTC  
 CATCTGGAAGAAGCTGCGCGATGAGATCAACCTTGCTAAGCAGGAAGCCAGCGGCTGAAGGAGCTGC  
 GGGAGGGTACTGAGAATGAGCGGAGCCGCAAAAATATGCTGAGGAGGAGTTGGAGCAGGTTCCGGAGGC  
 CTTGAGGAAAGCAGAGAAGGAGCTAGAATCTCACAGCTCATGGTATGCTCCAGAGGCCCTCAGAAGTGG  
 CTGCAGCTGACACATGAGGTGGAGGTGCAATATTACAACATCAAGAAGCAAAATGCTGAGAAGCAGCTGC  
 TGGTGGCCAAGGAGGGGCTGAGAAGTAAAAAGAAGAGAAACACACTTTTGGCACCTTCCACGTGGC  
 CCACAGCTCTCCCTGGATGATGTAGATCATAAAATTCTAACAGCTAAGCAAGCACTGAGCGAGGTGACA  
 GCAGCATTGCGGGAGCGCTGCACCGCTGGCAACAGATCGAGATCCTCTGTGGCTTCCAGATTGTCAACA  
 ACCCTGGCATCCACTCACTGGTGGCTGCCTCAACATAGACCCAGCTGGATGGGAGTACACGCCCCAA  
 CCCTGCTCACTTCATCATGACTGACGACGTGGATGACATGGATGAGGAGATTGTGTCTCCCTTGTCCATG  
 CAGTCCCTAGCCTGCAGAGCAGTGTTCGGCAGCGCTGACGGAGCCACAGCATGGCCTGGGATCTCAGA  
 GGGATTTGACCCATTCCGATTCCGAGTCTCCCTCCACATGAGTGACCGCCAGCGTGTGGCCCCAAACC  
 TCCTCAGATGAGCCGTGCTGCAGACGAGGCTCTCAATGCCATGACTTCCAATGGCAGCCACCGGCTGATC  
 GAGGGGTCCACCCAGGCTCTCTGGTGGAGAACTGCCTGACAGCCCTGCCCTGGCCAAGAAGGCATTAC  
 TGGCGCTGAACCATGGGCTGGACAAGGCCACAGCCTGATGGAGCTGAGCCCTCAGCCCCACCTGGTGG  
 CTCTCCACATTTGGATTCTTCCGTTCTCACAGCCCCAGCTCCCCAGACCCAGACACACCATCTCCAGTT  
 GGGGACAGCCGAGCCCTGCAAGCCAGCCGAAACACACGATTCCCCACCTGGCTGGCAAGAAGGCTGTGG  
 CTGAGGAGGATAATGGCTCTATTGGCGAGGAAACAGACTCCAGCCAGGCCGGAAGAAGTTTCCCTCAA  
 AATCTTTAAGAAGCCTCTTAAGAAG

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC205678 representing NM\_003156  
 Red=Cloning site Green=Tags(s)

MDVVCVRLALWLLWGLLLHQGQSLSHSHSEKATGTSSGANSEESTAAEF CRIDKPLCHSEDEKL SFEAVRN  
 IHKLMDDDANGDVDEESDFLREDLNHYDPTVKHSTFHGEDKLSVDELWKAWKSEVYNWTVDEVVQW  
 LITYVELPQYEETFRKLQLSGHAMPRLAVTNTTMTGTVLKMTDRSHRQKLQKALD TVLFGPPLL TRHNN  
 LKDFMLVVSIVIGVGGCWFAYIQNRYSKHEHMMKMDLEGLHRAEQSLHDLQERLHKAQEEHRTVEVEKV  
 HLEKLRDEINLAKQEAQRLKELREGTENERSRQKYAEEELQVREALRKAKELESHSSWYAPEALQKW  
 LQLTHEVEVQYYNIKKQNAEKQLLVAKEGAEKIKKRNTLFGTFHVAHSSSLDDVDHKILTAKQALSEVT  
 AALRERLHRWQIEILCGFQIVNPNGIHSLVAALNIDPSWMGSTRPNAHFIMTDDVDDMDEEIVSPLSM  
 QSPSLQSSVRQRLTEPQHGLGSQRDLTHSDSESSLHMSDRQRVAPKPPQMSRAADEALNAMTNGSHRLI  
 EGVHPGSLVEKLPD SPALAKKALLALNHGLDKAHS LMELSPSAPPGGSPHL DSSRSHPSSPDPDTPSPV  
 GDSRALQASRNTRIPHLAGKKA VAEEDNGSIGEETDSSPGRKKFPLKIFKKPLKK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg2637\\_d05.zip](https://cdn.origene.com/chromatograms/mg2637_d05.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_003156

**ORF Size:** 2055 bp

**OTI Disclaimer:** 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 [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_003156.4](#)

**RefSeq Size:** 4039 bp

**RefSeq ORF:** 2058 bp

**Locus ID:** 6786

**UniProt ID:** [Q13586](#)

**Cytogenetics:** 11p15.4

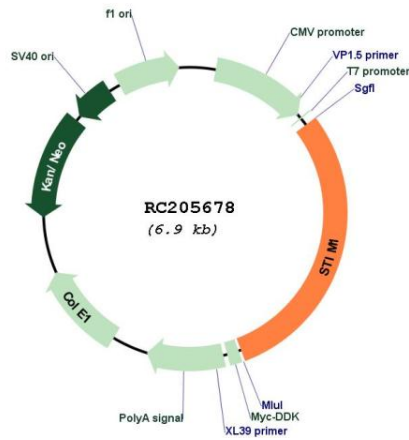
**Protein Families:** Transmembrane

**MW:** 77.42 kDa

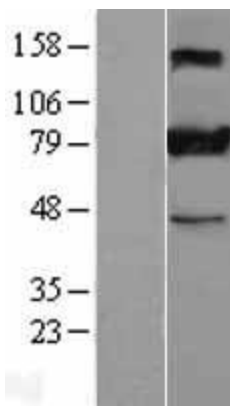
**Gene Summary:**

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]

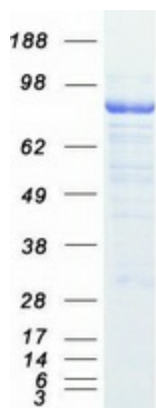
**Product images:**



Circular map for RC205678



Western blot validation of overexpression lysate (Cat# [LY401099]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205678 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STIM1 protein (Cat# [TP305678]). The protein was produced from HEK293T cells transfected with STIM1 cDNA clone (Cat# RC205678) using MegaTran 2.0 (Cat# [TT210002]).