

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)



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ORF Nucleotide
Sequence:

>RC205678 representing NM_003156
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGATGTATGCGTCCGTCTTGCCCTGTGGCTCCTCTGGGACTCCTCCTGCACCAGGGCCAGAGCCTCA
GCCATAGTCACAGTGAGAAGGCGACAGGAACCAGCTCGGGGGCCAACTCTGAGGAGTCCACTGCAGCAGA
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ATCCACAAACTGATGGACGATGATGCCAATGGTGTGTGGATGTGGAAGAAAGTATGAGTTCCTGAGGG
AAGACCTCAATTACCATGACCCAACAGTGAAACACAGCACCTTCCATGGTGAAGTAAAGCTCATCAGCGT
GGAGGACTGTGGAAGGCATGGAAGTATCAGAAGTATACAATTGGACCGTGGATGAGGTGGTACAGTGG
CTGATCACATATGTGGAGCTGCCTCAGTATGAGGAGACCTTCCGGAAGCTGCAGCTCAGTGGCCATGCCA
TGCCAAGGCTGGCTGTCACCAACACCACCATGACAGGGACTGTGCTGAAGATGACAGACCGGAGTATCG
GCAGAAGCTGCAGCTGAAGGCTCTGGATACAGTGTCTTTGGGCCTCCTCTTGACTCGCCATAATCAC
CTCAAGGACTTCATGCTGGTGGTGTCTATCGTTATTGGTGTGGCGGCTGCTGGTTTGCCTATATCCAGA
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GGGATTTGACCCATTCCGATTCCGAGTCTCCCTCCACATGAGTGACCGCCAGCGTGTGGCCCCAAACC
TCCTCAGATGAGCCGTGCTGCAGACGAGGCTCTCAATGCCATGACTTCCAATGGCAGCCACCGGCTGATC
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TGGCGCTGAACCATGGGCTGGACAAGGCCACAGCCTGATGGAGCTGAGCCCTCAGCCCCACCTGGTGG
CTCTCCACATTTGGATTCTCCCGTTCTCACAGCCCCAGCTCCCCAGACCCAGACACACCATCTCCAGTT
GGGGACAGCCGAGCCCTGCAAGCCAGCCGAAACACACGCATTCCCCACCTGGCTGGCAAGAAGGCTGTGG
CTGAGGAGGATAATGGCTCTATTGGCGAGGAAACAGACTCCAGCCAGGCCGGAAGAAGTTTCCCTCAA
AATCTTTAAGAAGCCTCTTAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205678 representing NM_003156
Red=Cloning site Green=Tags(s)

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

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: 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 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.

RefSeq: [NM_003156.4](#)

RefSeq Size: 4039 bp

RefSeq ORF: 2058 bp

Locus ID: 6786

UniProt ID: [Q13586](#)

Cytogenetics: 11p15.4

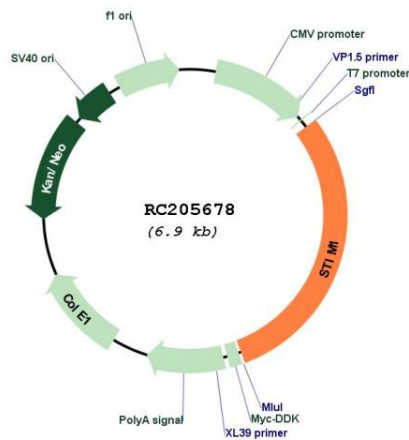
Protein Families: Transmembrane

MW: 77.42 kDa

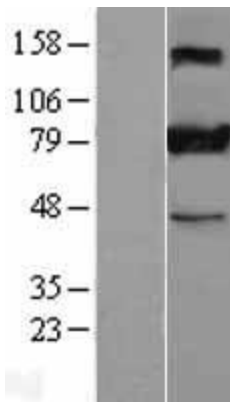
Gene Summary:

This gene encodes a type 1 transmembrane protein that mediates Ca²⁺ influx after depletion of intracellular Ca²⁺ stores by gating of store-operated Ca²⁺ 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]

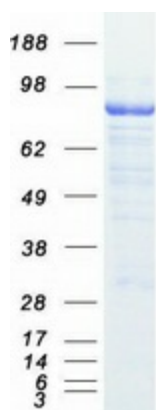
Product images:



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]).