

Product datasheet for **RC239573**

Stromal interaction molecule 1 (STIM1) (NM_001277961) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Stromal interaction molecule 1 (STIM1) (NM_001277961) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STIM1
Synonyms:	D11S4896E; GOK; IMD10; STRMK; TAM; TAM1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RC239573 representing NM_001277961
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGATGTATGCGTCCGTCTTGCCCTGTGGCTCCTCTGGGGACTCCTCCTGCACCAGGGCCAGAGCCTCA
GCCATAGTCACAGTGAGAAGGCGACAGGAACCAGCTCGGGGGCCAACTCTGAGGAGTCCACTGCAGCAGA
GTTTTGCCGAATTGACAAGCCCTGTGTACAGTGAGGATGAGAACTCAGCTTCGAGGCAGTCCGTAAC
ATCCACAACTGATGGACGATGATGCCAATGGTGTGTGGATGTGGAAGAAAGTATGAGTTCCTGAGGG
AAGACCTCAATTACCATGACCCAACAGTGAAACACAGCACCTTCCATGGTGGGATAAGCTCATCAGCGT
GGAGGACCTGTGGAAGGCATGGAAGTATCAGAAGTATACAATTGGACCGTGGATGAGGTGGTACAGTGG
CTGATCACATATGTGGAGCTGCCTCAGTATGAGGAGACCTTCCGGAAGCTGCAGCTCAGTGGCCATGCCA
TGCCAAGGCTGGCTGTCACCAACACCACCATGACAGGGACTGTGCTGAAGATGACAGACCGGAGTATCG
GCAGAAGCTGCAGCTGAAGGCTCTGGATACAGTGTCTTTGGGCCTCCTCTTGACTCGCCATAATCAC
CTCAAGGACTTCATGCTGGTGGTGTCTATCGTTATTGGTGTGGCGGCTGCTGGTTTGCCTATATCCAGA
ACCGTTACTCCAAGGAGCACATGAAGAAGATGATGAAGGACTTGGAGGGTTACACCGAGCTGAGCAGAG
TCTGCATGACCTTCAAGAAAGGCTGCACAAGGCCAGGAGGAGCACCGCACAGTGGAGGTGGAGAAGGTC
CATCTGAAAAGAAGCTGCGCGATGAGATCAACCTTGCTAAGCAGGAAGCCAGCGGCTGAAGGAGCTGC
GGGAGGGTACTGAGAATGAGCGGAGCCGCAAAAATATGCTGAGGAGGAGTTGGAGCAGGTTCCGGAGGC
CTTGAGGAAAGCAGAGAAGGAGCTAGAATCTCACAGCTCATGGTATGCTCCAGAGGCCCTCAGAAGTGG
CTGCAGCTGACACATGAGGTGGAGGTGCAATATTACAACATCAAGAAGCAAAATGCTGAGAAGCAGCTGC
TGGTGGCCAAGGAGGGGCTGAGAAGATAAAAAGAAGAGAAACACACTCTTTGGCACCTCCACGTGGC
CCACAGCTCTCCCTGGATGATGTAGATCATAAAATTCTAACAGCTAAGCAAGCACTGAGCGAGGTGACA
GCAAGATTGCGGGAGCGCTGCACCGCTGGCAACAGATCGAGATCCTCTGTGGCTTCCAGATTGTCAACA
ACCCTGGCATCCACTCACTGGTGGCTGCCTCAACATAGACCCAGCTGGATGGGAGTACACGCCCCAA
CCCTGCTCACTTCATCATGACTGACGACGTGGATGACATGGATGAGGAGATTGTGTCTCCCTTGTCCATG
CAGTCCCTAGCCTGCAGAGCAGTGTTCGGCAGCGCTGACGGAGCCACAGCATGGCCTGGGATCTCAGA
GGTTGGTAGAGGGCGAGGCTGGCCACTTCTTGACAAGCCGGTATCTCTGCGCGAATGCGCAGCCTTTC
ATCTGGACAGTCTTTCAGTCTGAAGGCTACGGGACCAGCTCTCCATCTGCCTCTGCTGCTCTTCTTGC
TCCTCTTCCATCACCACCATCACCCTACCACCACCACCACCACCTTACCACCGTCCATGTCCACC
CTGTTTATTACCACCACAGCACTTCTATTTCTCCAGATGGAGCCCTACCCTGACACACCCCTTCTGA
CAGCACCGCTGTGATGCCTGGGCATTAGAGAGCTTGGGGGATTTGACCCATTCCGATTCGGAGTCTCC
CTCCACATGAGTGACCGCCAGCGTGTGGCCCCAACTCCTCAGATGAGCCGTGCTGCAGACGAGGCTC
TCAATGCCATGACTTCCAATGGCAGCCACCGGCTGATCGAGGGGGTCCACCCAGGGTCTCTGGTGGAGAA
ACTGCCTGACAGCCCTGCCCTGGCAAGAAGGCATTACTGGCGCTGAACCATGGGCTGGACAAGGCCAC
AGCCTGATGGAGCTGAGCCCTCAGCCCCACCTGGTGGCTCTCCACATTTGGATTCTTCCGTTCTCACA
GCCCCAGCTCCCCAGACCAGACACCATCTCCAGTTGGGACAGCCGAGCCCTGCAAGCCAGCCGAAA
CACACGCATTTCCACCTGGCTGGCAAGAAGGCTGTGGCTGAGGAGGATAATGGCTCTATTGGCGAGGAA
ACAGACTCCAGCCAGGCCGGAAGAAGTTCCCTCAAATCTTTAAGAAGCCTCTTAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239573 representing NM_001277961
Red=Cloning site Green=Tags(s)

```
MDVVCVRLALWLLWGLLLHQGQSLSHSHSEKATGTSSGANSEESTAAEFCRIDKPLCHSEDEKLSFEAVRN
IHKLMDDDANGDVDEESDEFREDLNYHDPTVKHSTFHGEDKLSVDELWKAWKSSSEVYNWTVDEVVQW
LITYVELPQYEETFRKLQLSGHAMPRLAVTNTTMTGTVLKMTDRSHRQKLQKALDVTLVFGPPLLTRHNN
LKDFMLVVSIVIGVGGCWFAYIQNRYSKHEMCKMMKDLEGLHRAEQSLHDLQERLHKAQEEHRTVEVEKV
HLEKKLRDEINLAKQEAQRLKELREGTENERSRQKYAEELEQVREALRKAKEKELSHSSWYAPEALQKW
LQLTHEVEVQYYNIKKQNAEKQLLVAKEGAEKIKKRNTLFGTFHVAHSSSLDDVDHKILTAKQALSEVT
AALRERLHRWQQIEILCGFQIVNPNPIHSLVAALNIDPSWGMSTRPNAHFIMTDDVDDMDEEIVSPLSM
QSPSLQSSVRQRLTEPQHGLGSQRLVEGEAGHFLT SRVSLRRMRLSSGQSFSEGYGTSSPSASAAAASC
SSSITTTTTTTTTTTTTTTVVHVHPVYYHHSTSYFLQMEPYPDTPPSDSTAVMPGHSESLGDLTHSDSESS
LHMSDRQRVAPKPPQMSRAADEALNAMTSNGSHRLIEGVHPGSLVEKLPDSPALAKKALLALNHGLDKAH
SLMELSPSAPPGGSPHLDSRSHPSSPDPDTPSPVGDSTRALQASRNTRIPHLAGKKAVAEEEDNGSIEEG
TDSSPGRKKFPLKIFKKPLKK
```

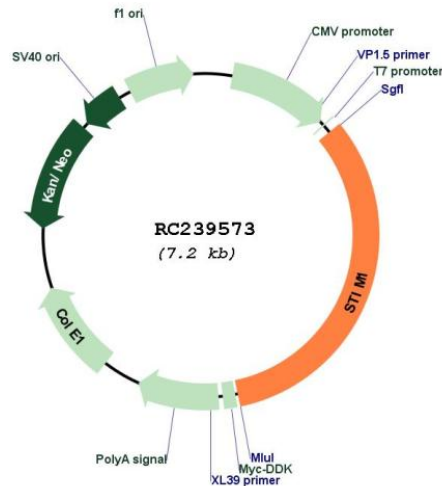
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001277961

ORF Size: 2373 bp

OTI Disclaimer: 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_001277961.3](#)

RefSeq Size: 4380 bp

RefSeq ORF: 2376 bp

Locus ID: 6786

Cytogenetics: 11p15.4

Protein Families: Transmembrane

MW: 89.1 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]