

Product datasheet for **RC238803**

Stromal interaction molecule 1 (STIM1) (NM_001277962) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Stromal interaction molecule 1 (STIM1) (NM_001277962) 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



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ORF Nucleotide Sequence:

>RC238803 representing NM_001277962
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGATGTATGCGTCCGTCTTGCCCTGTGGCTCCTCTGGGACTCCTCTGCACCAGGGCCAGAGCCTCA
 GCCATAGTCACAGTGAGAAGGCGACAGGAACCAGCTCGGGGCCAACTCTGAGGAGTCCACTGCAGCAGA
 GTTTTGCCGAATTGACAAGCCCTGTGTACAGTGAGGATGAGAACTCAGCTTCGAGGCAGTCCGTAAC
 ATCCACAACTGATGGACGATGATGCCAATGGTGTGTGGATGTGGAAGAAAGTATGAGTTCCTGAGGG
 AAGACCTCAATTACCATGACCAACAGTGAAACACAGCACCTTCCATGGTGGGATAAGCTCATCAGCGT
 GGAGGACTGTGGAAGGCATGGAAGTATCAGAAGTATACAATTGGACCGTGGATGAGGTGTACAGTGG
 CTGATCACATATGTGGAGCTGCCTCAGTATGAGGAGACCTCCGGAAGCTGCAGCTCAGTGGCCATGCCA
 TGCCAAGGCTGGCTGTCACCAACACCACCATGACAGGGACTGTGCTGAAGATGACAGACCGGAGTATCG
 GCAGAAGCTGCAGCTGAAGGCTCTGGATACAGTGTCTTTGGGCCTCCTCTTTGACTCGCCATAATCAC
 CTAAGGACTTCATGCTGGTGGTGTCTATCGTTATTGGTGTGGCGGCTGCTGGTTTGCCTATATCCAGA
 ACCGTTACTCCAAGGAGCACATGAAGAAGATGATGAAGGACTTGGAGGGTTACACCGAGCTGAGCAGAG
 TCTGCATGACCTTCAGGAAAGGCTGCACAAGGCCAGGAGGAGCACCGCACAGTGGAGGTGGAGAAGGTC
 CATCTGGAAGAAGCTGCGCGATGAGATCAACCTTGCTAAGCAGGAAGCCAGCGGCTGAAGGAGCTGC
 GGGAGGGTACTGAGAATGAGCGGAGCCGCAAAAATATGCTGAGGAGGAGTTGGAGCAGGTTCCGGAGGC
 CTTGAGGAAAGCAGAGAAGGAGCTAGAATCTCACAGCTCATGGTATGCTCCAGAGGCCCTCAGAAGTGG
 CTGCAGCTGACACATGAGGTGGAGGTGCAATATTACAACATCAAGAAGCAAAATGCTGAGAAGCAGCTGC
 TGGTGGCCAAGGAGGGGCTGAGAAGTAAAAAGAAGAGAAACACACTCTTTGGCACCTCCACCGTGGC
 CCACAGCTCTCCCTGGATGATGTAGATCATAAAATTCTAACAGCTAAGCAAGCACTGAGCGAGGTGACA
 GCAGCATTGCGGGAGCGCTGCACCGCTGGCAACAGATCGAGATCCTCTGTGGCTTCCAGATTGTCAACA
 ACCCTGGCATCCACTCACTGGTGGCTGCCTCAACATAGACCCAGCTGGATGGGCAGTACACGCCCCAA
 CCCTGCTCACTTCATCATGACTGACGACGTGGATGACATGGATGAGGAGATTGTGTCTCCCTGTCCATG
 CAGTCCCTAGCCTGCAGAGCAGTGTTCGGCAGCGCTGACGGAGCCACAGCATGGCCTGGGATCTCAGA
 GAGGATCATCTCTAAAGGCAAACAGGCTCTCTAGTAAGGGATTTGACCCATTCCGATTCCGAGTCTCC
 TCCACATGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238803 representing NM_001277962
 Red=Cloning site Green=Tags(s)

MDVCVRLALWLLWGLLLHQGQSLSHSHSEKATGTSSGANSEESTAAEFCRIDKPLCHSEDEKLSFEAVRN
 IHKLMDDDANGDVEEDEFLEFLREDLNYHDPTVKHSTFHGEDKLSVDELWKAWSSEVYNWTVDEVVQW
 LITYVELPQYEETFRKLQLSGHAMPRLAVTNTMTGTVLKMTDRSHRQKLQKALDVTVFGPPLLTRHNN
 LKDFMLVVSIVIGVGGCWFAYIQNRYSKHEHMKMMKDLLEGLHRAEQSLHDLQERLHKAQEEHRTVEYEV
 HLEKKLDEINLAKQEAQRLKELREGTENERSRQKYAEELQVREALRKAKELESHSSWYAPEALQKW
 LQLTHEVEVQYYNIKKQNAEKQLLVAKEGAEKIKKRNTLFGTFHVAHSSSLDDVDHKILTAKQALSEVT
 AALRERLHRWQIEILCGFQIVNPNPIHSLVAALNIDPSWMGSTRPNPAHFIMTDDVDDMDEEIVSPLSM
 QSPSLQSSVRQRLTEPQHGLGSQRGSSSLKANRLSSKGFDPFRFGVLPPE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

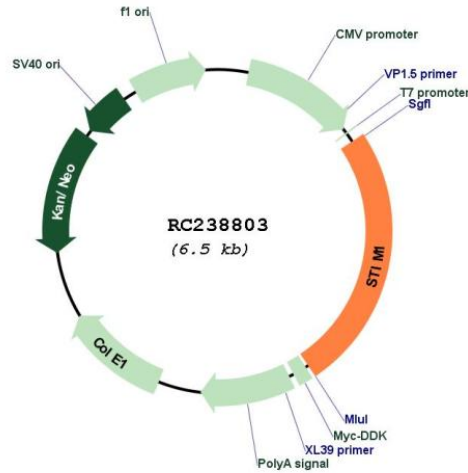
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001277962
ORF Size:	1620 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:	<ol style="list-style-type: none">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_001277962.2
RefSeq Size:	4099 bp
RefSeq ORF:	1623 bp
Locus ID:	6786
UniProt ID:	Q13586
Cytogenetics:	11p15.4
Protein Families:	Transmembrane
MW:	62.6 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]