

Product datasheet for **MR210034**

Stim1 (NM_009287) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Stim1 (NM_009287) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Stim1
Synonyms:	SIM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR210034 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATGTGTGCGCCCGTCTTGCCTGTGGCTTCTTTGGGGCTCCTTCTGCATCAGGGCCAGAGTCTCA
 GCCATAGTCACAGTGAAAAGAATACAGGAGCTAGCTCCGGGGCGACTTCTGAAGAGTCTACCGAAGCAGA
 GTTTTGCCGAATTGACAAGCCCTGTGCCACAGTGAGGATGAGAAGCTCAGCTTTGAGGCCGTCCGAAAC
 ATCCATAAGCTGATGGATGACGATGCCAATGGTGTGGATGTGGAAGAAAGTATGAGTTCCTAAGGG
 AAGACCTCAATTACCATGACCAACAGTAAACATAGCACCTTCCATGGTGGAGATAAGCTTATCAGCGT
 GGAGGACCTGTGGAAGCGTGAAATCATCAGAAGTGTACAAGTGGACTGTGGATGAGGTGATACAGTGG
 CTCATTACGTATGTGGAGCTGCCACAGTATGAGGAGACCTCCGGAAGTGCAGCTTACTGGCCACGCCA
 TGCCAAGGCTAGCAGTAACCAACACCACCATGACAGGGACTGTACTGAAGATGACAGATCGGAGCCACAG
 GCAGAAGCTGCAGCTGAAGGCCCTGGACACAGTGTGTTGGGCCTCCTCTTGGACTCGGCATAATCAC
 CTGAAGGACTTCATGCTGGTGGTGTCTATCGTTATTGGTGTGGTGGCTGCTGGTTTGCCTATATCCAGA
 ACCGTTACTCTAAGGAGCACATGAAGAAAATGATGAAGGATCTGGAAGGGTTACACCGGGCTGAGCAGAG
 TCTGCATGACCTTCAAGAAAGGCTGCACAAGGCCAGGAGGAGCACCGAAGTGTGGAAGTAGAGAAAGTC
 CACCTGGAGAAGAAGCTGCGAGATGAGATCAACCTTGCCAAGCAGGAAGCTCAGCGGCTGAAGGAGCTGA
 GGGAGGGTACTGAGAATGAGAGGAGCCGTCAAAAATATGCTGAGGAAGAGCTGGAGCAGGTTCCGGAGGC
 CTTGAGGAAAGCAGAGAAGGAGCTGGAATCACACAGCTCATGGTATGCTCCTGAGGCCCTGCAGAAGTGG
 CTGCAGCTGACCCATGAGGTGGAGGTGCAGTACTACAACATCAAGAAGCAAAATGCAGAGAGGCAGCTGC
 TGGTGGCCAAGGAGGGGGCTGAGAAAATAAAAAGAAGAGAAACACGCTTTTGGTACCTTCCATGTGGC
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 CCCCGCCACTTCATCATGACTGACGATGTGGATGACATGGATGAGGAGATTGTGTGCGCCTTGTCCATG
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 TCCTCAGATGGGCGTGTGCAGATGAAGCTCTCAATGCCATGCCTTCCAATGGCAGCCATCGGCTGATT
 GAGGGGTCCATCCAGGATCTCTGGTGGAGAACTGCCTGACAGCCCTGCTCTGGCCAAGAAGACATTTA
 TGGCGTTGAACCATGGCCTAGACAAGGCCACAGCCTGATGGAGCTGAACCCCTCAGTCCCACCTGGTGG
 CTCCCCACTTTTGGATTCTTCCATTCTTTAGCCCCAGTTCCCCAGACCCAGACACACCATCTCCAGTT
 GGGGACAACCGAGCTCTGCAGGGTAGCCGAAACACACGAATCCCCACTTGGCTGGCAAGAAGGCAATGG
 CTGAGGAGGATAATGGTTCCATTGGTGGAGGAGACAGACTCCAGTCCAGGCAGGAAGAAGTTTCTCTCAA
 AATTTTAAAGAAGCCTCTTAAGAAG

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210034 protein sequence
Red=Cloning site Green=Tags(s)

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MDVCARLALWLLWGLLLHQGQSLSHSHSEKNTGASSGATSEESTEAEFCRIDKPLCHSEDEKL SFEAVRN
IHKLMDDDANGDVDEESDEFREDLNYHDPTVKHSTFHGEDKLI SVEDLWKAWKSSSEVYNWTVDEVIQW
LITYVELPQYEE TFRKLQLTGHAMPRLAVTNTTMTGTVLKMTDRSHRQKLQKALD TVLFGPPLL TRHNN
LKDFMLVVSIVIGVGGCWFAYIQNRYSKHEMKMMKDL EGLHRAEQSLHDLQERLHKAQEEHRTVEVEKV
HLEKCLRDEINLAKQEAQRLKELREGTENERSRQKYAEELEQVREALRKAKEKELSHSSWYAPEALQKW
LQLTHEVEVQYNIKKQNAERQLLVAKEGAEKIKKRNTLFGTFHVAHSSSLDDVDHKILTAKQALSEVT
AALRERLHRWQIEILCGFQIVNPNPIHSLVAALNIDPSWGMSTRPNPAHFIMTDDVDDMDEEIVSPLSM
QSPSLQSSVRQRLTEPQLGLGSQRDLTHSDSESSLHMSDRQRVAPKPPQMGRAADEALNAMPNGSHRLI
EGVHPGSLVEKLPD SPALAKKTFMALNHGLDKAHS LMELNPSVPPGGSPLLDSSHSLSPSSPDPDTPSPV
GDNRALQGSRNTRIPHLAGKKAMAEEDNGSIGEETDSSPGRKKFPLKIFKKPLKK
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_009287

ORF Size: 2058 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_009287.3](#)

RefSeq Size: 3609 bp

RefSeq ORF: 2058 bp

Locus ID: 20866

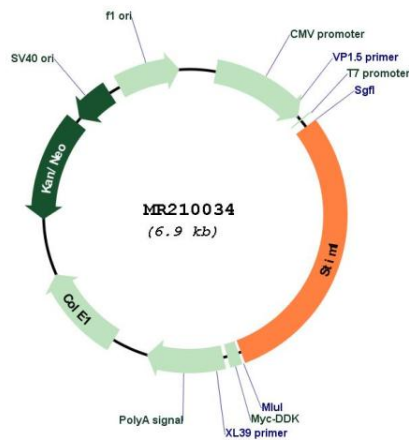
UniProt ID: [P70302](#)

Cytogenetics: 7 54.71 cM

MW: 77.6 kDa

Gene Summary: Plays a role in mediating store-operated Ca(2+) entry (SOCE), a Ca(2+) influx following depletion of intracellular Ca(2+) stores. Acts as Ca(2+) sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca(2+) depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca(2+) release-activated Ca(2+) (CRAC) channel subunit ORAI1. Involved in enamel formation. Activated following interaction with STIMATE, leading to promote STIM1 conformational switch.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210034