

Product datasheet for **RR212859**

Stim1 (NM_001108496) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Stim1 (NM_001108496) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Stim1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RR212859 representing NM_001108496
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGATGTGTGCGCTCGTCTTGCCCTGTGGCTTCTTTGGGGCTCCTTCTGCATCAGGGCCAGAGTCTCA
GCCATAGTCACAGTGAGAAGAATACAGGAGCTAGCTCGGGGGCGACTTCTGAAGAGTCTACCGAAGCAGA
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AATTTTAAAGAAGCCTCTTAAGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RR212859 representing NM_001108496
Red=Cloning site Green=Tags(s)

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MDVCARLALWLLWGLLLHQGQSLSHSHSEKNTGASSGATSEESTEAEFCRIDKPLCHSEDEKL SFEAVRN
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LITYVELPQYEE TFRKLQLTGHAMPRLAVTNTTMTGTVLKMTDRSHRQKLQKALDVTLFGPPLL TRHNN
LKDFMLVVSIVIGVGGCWFAYIQNRYSKHEMKMMKDL EGLHRAEQSLHDLQERLHKAQEEHRTVEVEKV
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QSPSLQSSVRQRLTEPQHGLGSQRDLTHSDSESSLHTSDRQRVAPKPPQMGRAADEALNATSSNGSHRLI
EGVHPGSLVEKLPD SPALAKKTILALNHGLDKAHS LMELNPSVPPGGSPLLDSSSHSPSSPDPDTPSPV
GDSRALQGSRNTRIPHLAGKKAMAEEDNGSIGEETDSSPGRKKFPLKIFKKPLKK
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001108496

ORF Size: 2055 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_001108496.2](#), [NP_001101966.2](#)

RefSeq Size: 3839 bp

RefSeq ORF: 2058 bp

Locus ID: 361618

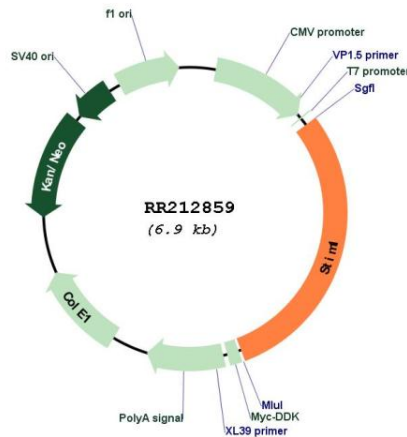
UniProt ID: [P84903](#)

Cytogenetics: 1q32

MW: 77.4 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 (By similarity). 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 (PubMed:16208375). Involved in enamel formation (By similarity). Activated following interaction with STIMATE, leading to promote STIM1 conformational switch (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR212859