

Product datasheet for **RG224102**

STIM2 (NM_020860) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STIM2 (NM_020860) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	STIM2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG224102 representing NM_020860
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAACGCAGCCGGGATCAGAGCTCCGGAGGCCGGTCCGATGGGACCAGGCTGGCGCCGGCGGGA
 GCCCGTGTCTGAGGCGGGGGCGGCCGGAGGAGTCGCCGGCGCGGTGGTGGCCCTCGCGGAGCCGG
 CGAGCTGCAGGCGGGCGGGCGCGCTGCGCTTTCACCCGGCTTCTCCTCGGCGCCTTCATCCCGCCTCG
 ACTCCTGGCCAGCGTGGGGCTGGCTGTGCGGCGGCGCGCTGGGCTGCGTTGCTGGTGTGCGGCTGC
 TGGTAGCCGGAGCGGGACGGATGCGAGCTTGTGCCCGGCACCTCCGCGGGCGGGCGGACTGGCTC
 TGCCGCAACTGCCGCTCCTCCTCCGCGGCGGGCGCGGATAGCCCGGCGCTCATGACAGATCCCTGC
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 AGCGCAAAATGATGGATGAAATCAATTATGCAAGGAGGAGGCTTGTGCGCTGAGAGCACTAAGGGAGGG
 AGCTGAAATGTGAATTGAGTAGACGTGAGTATGCAGAACAGGAATTGGAACAGGTTCCGATGGCTTGAAA
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 TAACACATGAAGTAGAAGTGCAATACTACAATATTAAGACAAAACGCTGAAATGCAGTAGCTATTGC
 TAAAGTAGAGCAGAAAAAATTAAGAAAGAGAGAACAGTCTTTGGGACTCTGCACGTTGCACACAGC
 TCCTCCCTAGATGAGGTAGACCACAAAATCTGGAAGCAAGAAAGCTCTCTGAGTTGACAACTTGT
 TACGAGAACGACTTTTTCGCTGGCAACAATTTGAGAAGATCTGTGGCTTTCAGATAGCCATAACTCAGG
 ACTCCCAGCCTGACCTTCCCTTTATCTGATCACAGCTGGTGGTGTGCCAGAGTCTCCATTCCA
 CCCTATCCAATTGCTGGAGGAGTTGATGACTTAGATGAAGACACACCCCAATAGTGTACAATTTCCCG
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 CCTCACCACCCGCAACACACACCACACTCCTTGCTTCCCTGATCCAGATATCCTCTCAGTGTCAAGTT
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 GCCAGACACAGCTTCAAGATGTGACTCCTTAAATTTCTCCATTGGAAGGAAACAGTCTCCTCCTTAAAGC
 CTCGAGATATACCAACATTATCTCCGCAAAGATATCAAGAGATGAGGTGTCCCTAGAGGATTCCTCC
 GAGGGGATTCGCTGTAAGTGTGGATGTGCTTTGGGTTCTCCGACTGTGTAGGCTGACAGAACTAA
 GAGTATGATCTTCAGTCTGCAAGCAAAGTGTACAATGGCATTGAGAGAAATCCTGTAGCATGAACCA
 CTTTCCAGTGGCATCCCGGTGCCTAAACCTCGCCACACATCATGTTCTCAGCTGGCAACGACAGTAAAC
 CAGTTCAGGAAGCCCAAGTGTGCCAGAATAAGCAGCATCCACATGACCTTTGTCATAATGGAGAGAA
 AAGCAAAAAGCCATCAAAAATCAAAAGCCTTTTTAAGAAGAAATCTAAG

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG224102 representing NM_020860
 Red=Cloning site Green=Tags(s)

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MNAAGIRAPEAAGADGTRLAPGGSPCLRRRGRPEESPAAVVAPRGAGELQAAGAPLRFHPASPRRLHPAS
TPGPAWGWLRRRRWAALLVLGLLVAGAADGCELVPRHLRGRRTGSAATAASSPAAAAGDSPALMTDPC
MSLSPPCFTEEDRF SLEALQTIHKQMDDDKDGGIEVEESDEF IREDMKYKDATNKHSHLHREDKHITIED
LWKRWKTSEVHNWLTLEDTLQWL IEFVELPQYEKNFRDNNVKGTTLPRIAVHEPSFMI SQLKISDRSHRQK
LQLKALDVVLFGLPLTRPPHNWMDKDFILTVSIVIGVGGCWFAYTQNKTSKEHVAKMMKDLES LQTAEQSLM
DLQERLEKAQEENRNVAVEKQNLERKMMDEINYAKEEACRLRELREGAECESRRQYAEQELEQVRMALK
KAEKEFELRSSWSVPDALQKWLQLTHEVEVQYYNIKRQNAEMQLAIKDEAEKIKKRSTVFGTLHVAHS
SSLDEVDHKILEAKKALSELTTCLRERLFRWQQIEKICGQIAHNSGLPSLTSSL YSDHSWVMPRVSIP
PYPIAGGVDDLEDTPPIVSQFPGTMAKPPGSLARSSSLCRSRRSIVPSSPQPQRAQLAPHAPHSHPRH
PHHPQHTPHSLSPDPDILSVSSCPALYRNEEEEEAIYFSAEKQWEVPTASECDLNSSIGRKQSPPLS
LEIYQTLSPRKISRDEVSLEDSSRGDSPVTVDVSWGSPDCVGLTETKSMIFSPASKVYNGILEKSCSMNQ
LSSGIPVPKPRHTSCSSAGNDSKPVQEAPSVARISSIPHDLCHNGEKS KKKPSKIKSLFKKSK
  
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020860

ORF Size: 2499 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_020860.2](#)

RefSeq Size: 5156 bp

RefSeq ORF: 2241 bp

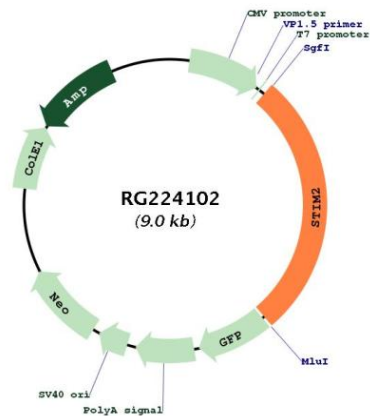
Locus ID: 57620

UniProt ID: [Q9P246](#)

Cytogenetics: 4p15.2

Gene Summary: This gene is a member of the stromal interaction molecule (STIM) family and likely arose, along with related family member STIM1, from a common ancestral gene. The encoded protein functions to regulate calcium concentrations in the cytosol and endoplasmic reticulum, and is involved in the activation of plasma membrane Orai Ca(2+) entry channels. This gene initiates translation from a non-AUG (UUG) start site. A signal peptide is cleaved from the resulting protein. Multiple transcript variants result from alternative splicing. [provided by RefSeq, Dec 2009]

Product images:



Circular map for RG224102