

## **Product datasheet for MC213043**

## Stac3 (NM\_177707) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Stac3 (NM\_177707) Mouse Untagged Clone

Tag: Tag Free Symbol: Stac3

Synonyms: 9830125E18

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >MC213043 representing NM\_177707

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACAGAAAAGGAAGTGGTGGAGTCCCCTCAGCCCCCTTTCCAGGAGAGACTCCGCAAAGTGGGCTAC AGCGACTGAAGCAGTTATTCAAGAAGGGCTCTCCAGAGACAGCTGAGATGGAGCCTCCCCCAGAGCCCCA AGCCAATGGAGAGGCGGTGGGGGCTGGGGGTGGGCCCATCTACTATATCTATGAGGAAGAAGAGGAGGAG GAGGAAGAGGAGGAACCACCCCCAGAACCTCCTAAGCTCGTCAACGACAAGCCCCACAAGTTCAAAGATC ACTTCTTCAAGAAGCCCAAGTTCTGCGATGTCTGTGCCCGGATGATTGTGCTCAATAACAAGTTTTGGACT CCGCTGCAAGAACTGCAAAACCAACATCCATGAGCATTGTCAGTCCTACGTGGAGATGCAGAGATGCTTC GGCAAGATCCCACCTGGTTTCCGTCGGGCCTATAGCTCCCCACTCTACAGCGACCAACAGTACGCTGTCT CTGCTGCCAATCGCAATGACCCCGTGTTTGAAACCCTGCGCGTCGGGGTGATCATGGCAAACAAGGAACG GAAGAAGGGCAGCAGATAAGAAAAATCCTCTGGCAGCCATGATGGAGGAGGAGCCAGAGTCAGCCAGG CCAGAGGAGGGCAAGTCACAGGATGGAAACAATGCAGAAAAGGACAAGAAGGCCGAGAAGAAACTCCTG ATGACAAAAACAAGCAGCCTGGCTTCCAGCAGTCTCATTACTTTGTGGCTCTCTATCGGTTCAAAGCCCT GGAGAAGGACCACCTGGATTTCCCGCCAGGGGAGAAGATCACAGTCATTGATGACTCCAATGAGGAGTGG TGGCGGGGAAAATCGGAGAAAGTCGGATTCTTCCCTCCAAACTTCATCATTCGGGTGCGGGCTGGAG AACGTGTGCACCGCGTGACCAGATCGTTTGTGGGGAACCGCGAGATTGGACAGATCACTCTCAAGAAGGA CCAGATCGTAGTGCAGAAAGGAGATGAAGCTGGTGGTTACGTCAAGGTCTACACCGGCCGCAAGGTGGGG CTGTTTCCCACCGACTTCCTGGAGGAGATTTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul



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**ACCN:** NM\_177707

**Insert Size:** 1083 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customercom">customercom</a> or by

calling 301.340.3188 option 3 for pricing and delivery.

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

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 177707.3</u>, <u>NP 808375.1</u>

 RefSeq Size:
 1790 bp

 RefSeq ORF:
 1083 bp

 Locus ID:
 237611

 UniProt ID:
 Q8BZ71

 Cytogenetics:
 10 D3



## **Gene Summary:**

Required for normal excitation-contraction coupling in skeletal muscle and for normal muscle contraction in response to membrane depolarization (PubMed:23818578, PubMed:27621462, PubMed:29467163). Required for normal Ca(2+) release from the sarcplasmic reticulum, which ultimately leads to muscle contraction (PubMed:23818578). Probably functions via its effects on muscle calcium channels. Increases CACNA1S channel activity, in addition to its role in enhancing the expression of CACNA1S at the cell membrane (PubMed:27621462). Has a redundant role in promoting the expression of the calcium channel CACNA1S at the cell membrane (PubMed:25548159, PubMed:27621462, PubMed:29467163). Slows down the inactivation rate of the calcium channel CACNA1C (PubMed:25548159, PubMed:29363593). [UniProtKB/Swiss-Prot Function]