

Product datasheet for **MG205507**

Stac3 (NM_177707) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Stac3 (NM_177707) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Stac3
Synonyms:	9830125E18
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205507 representing NM_177707 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACAGAAAAGGAAGTGGTGGAGTCCCCTCAGCCCCCTTTCCAGGAGAGACTCCGCAAAGTGGGCTAC
AGCGACTGAAGCAGTTATTCAAGAAGGGCTCTCCAGAGACAGCTGAGATGGAGCCTCCCCAGAGCCCCA
AGCCAATGGAGAGGCGGTGGGGGTGGGGCTGAGGAGCTCCCTACTATATCTATGAGGAAGAAGAGGAGGAG
GAGGAAGAGGAGGAACCACCCCAAGCTCCTAAGCTCGTCAACGACAAGCCCCACAAGTTCAAAGATC
ACTTCTCAAGAAGCCCAAGTTCTGCGATGTCTGTGCCCGGATGATTGTGCTCAATAACAAGTTTGGACT
CCGCTGCAAGAACTGCAAAACCAACATCCATGAGCATTGTGAGTCTACGTGGAGATGCAGAGATGCTTC
GGCAAGATCCCACCTGGTTTCCGTCGGGCTATAGCTCCCCACTCTACAGCGACCAACAGTACGCTGTCT
CTGCTGCCAATCGCAATGACCCCGTGTGAAACCCTGCGCGTCGGGGTATCATGGCAAACAAGGAACG
GAAGAAGGGGCAGGCAGATAAGAAAAATCCTCTGGCAGCCATGATGGAGGAGGAGCCAGAGTCAGCCAGG
CCAGAGGAGGGCAAGTCACAGGATGAAACAATGCAGAAAAGGACAAGAAGGCCGAGAAGAAAACTCTG
ATGACAAAAACAAGCAGCCTGGCTTCCAGCAGTCTCATTACTTTGTGGCTCTCTATCGGTTCAAAGCCCT
GGAGAAGGACGACCTGGATTTCCCGCCAGGGGAGAAGATCACAGTCATTGATGACTCCAATGAGGAGTGG
TGGCGGGGAAAATCGGAGAGAAAGTCGGATTCTCCCTCAAACCTTCATCATTCGGGTGCGGGCTGGAG
AACGTGTGCACCCGCTGACCAGATCGTTTGTGGGAAACCGGAGATTGGACAGATCACTCTCAAGAAGGA
CCAGATCGTAGTCAGAAAGGAGATGAAGCTGGTGGTTACGTCAAGGTCTACACCGGCCGCAAGGTGGG
CTGTTTCCACCGACTTCTGGAGGAGATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG205507 representing NM_177707
 Red=Cloning site Green=Tags(s)

MTEKEVVEVSPQPPFPGETPQSGLQRLKQLFKKGPETAEMEPPEPQANGEAVGAGGGPIYYIYEEEEEE
 EEEEEPPPEPKLVNDKPHKFKDHFHFKKPKFCDCARMIVLNNKFLRCKNCKTNIHEHCQSYVEMQRCF
 GKIPPGFRRAYSSPLYSDQQYAVSAANRNDPVFETLRVGVIMANKERKKQADKKNPLAAMMEEEPESAR
 PEEGKSQDGNNAEKDKKAEKTPDDKKNQPGFQQSHYFVALYRFKALEKDDLDFPPGEKITVIDDSNEEW
 WRGKIGEKVGFPPNFIIIRVRAGERVHRVTRSFVGNREIGQITLKKDQIVVQKGDAGGYVKVYTGRKVG
 LFPTDFLEEI

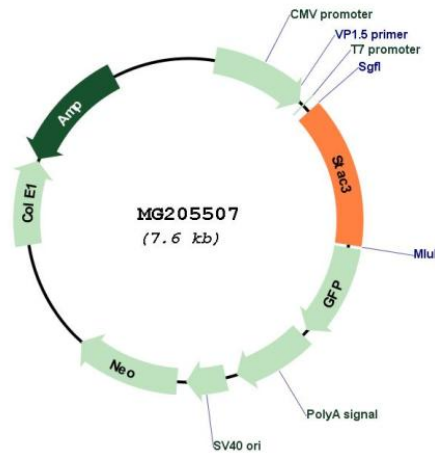
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_177707

ORF Size:	1080 bp
OTI Disclaimer:	<p>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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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_177707.4
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 sarcoplasmic 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]