

## Product datasheet for **MG204649**

### Sfxn1 (NM\_027324) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sfxn1 (NM_027324) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sfxn1
Synonyms:	2810002O05Rik; A930015P12Rik; f
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204649 representing NM_027324 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCTGGGGAAGTGCCACCCAACATTAACATCAAGGAGCCTCGATGGGACCAGAGCACGTTTCATTGGCC  
GAGCCAGTCACTTCTTACGGTTACTGATCCCAGAAATATCCTTTAACGAACGAACAGCTAGAGAATGC  
GAGGAAAGTGGTGCATGACTACAGGCAAGGAATCGTTCCTGCCGGCCTCACGAAAATGAGCTATGGAGA  
GCGAAGTACGCGTACGACTCGGCCTTCCATCCTGACACCGGTGAAAAGATGACTCTGATAGGAAGAAATGT  
CAGCTCAGTCCCAGTGAACATGACCATCACAGGCTGCATGATGACCTTCTACCGACCACACCGGCTGT  
GCTTTTCTGGCAGTGGATAAACCAGTCCCTCAATGCCGTGGTCAACTACCCAACAGAAGCGGTGACGCT  
CCCCTCACTGTGAATGAGCTGGGAACGGCTTATGTTTCTGCAACCACTGGCGCTGTGGCAACGGCCCTAG  
GACTCAATGCCTTAACCAAGCGTGTCTCCCCTGATAGGACGTTTTGTTCCCTTCGCTGCTGTAGCTGC  
TGCTAACTGCATTAACATCCCCTGATGAGACAAAGGGAGCTGAAGGTTGGTATTCTGTCACTGATGAA  
AATGGCACTCGCTTGGGAGAATCGACCAACGCAGCAAAGCAAGCCATCACGCAGGTGGTCATCTCCAGGA  
TCCTCATGGCAGCCCCGGCATGGCCATCCCTCCGTTTATCATGAACACCTTGGAAAAGAAAGCCTTTT  
AAAGAGGTTCCCCTGGATGAGTGCGCCAATCCAAGTACGTTGGTTGGCTTTTGTGGTATTGCCACC  
CCCCTGTGCTGTGCTCTGTTTCTCAGAAGAGTTCCATGTCTGTGACAAGCTTGGAGGATGAGTTGCAAG  
CCAGCATCAAAGGACTCATCTGAAATACGGCGTGTGTACTTTAACAAAGGCCTG

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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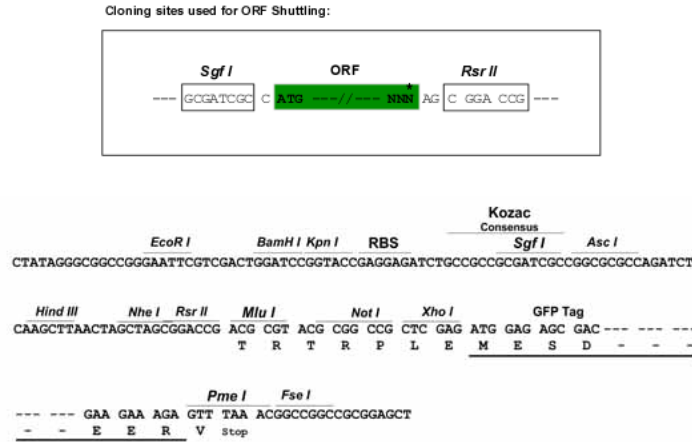
Protein Sequence: >MG204649 representing NM\_027324  
 Red=Cloning site Green=Tags(s)

MSGEVPPNINIKEPRWDQSTFIGRASHFFTVDPRNILLTNEQLENARKVVHDYRQGIVPAGLTENELWR  
 AKYAYDSAFHPDTGEKMTLIGRMSAQVPMNMTITGCMFTFYRTTPAVLFWQWLNQSFNAVVNYTNRSGDA  
 PLTVNELGTAYVSATTGAVATALGLNALTKRVSPLIGRFVPFAAVAAANCINIPLMRQRELKVGIPVTDE  
 NGTRLGESTNAAKQAITQVVISRILMAAPGMAI PPPFIMNTLEKKAF LKRFPWMSAPIQVTLVGFCLVFAT  
 PLLCALFPQKSSMSVTSLEDELQASIQRTHPEIRRVYFNKGL

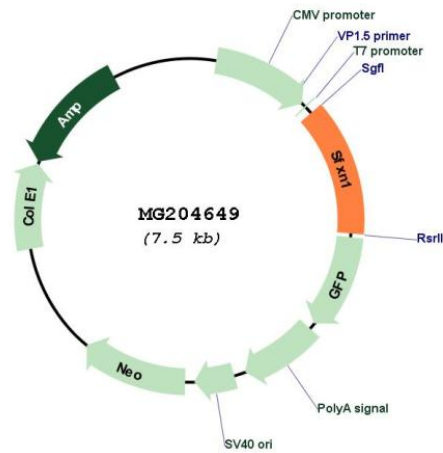
SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM\_027324

ORF Size: 966 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_027324.5</a>
<b>RefSeq Size:</b>	2803 bp
<b>RefSeq ORF:</b>	969 bp
<b>Locus ID:</b>	14057
<b>UniProt ID:</b>	<a href="#">Q99JR1</a>
<b>Cytogenetics:</b>	13 28.4 cM
<b>Gene Summary:</b>	Mitochondrial serine transporter that mediates transport of serine into mitochondria, an important step of the one-carbon metabolism pathway (By similarity). Mitochondrial serine is converted to glycine and formate, which then exits to the cytosol where it is used to generate the charged folates that serve as one-carbon donors (By similarity). Transports both D-serine and L-serine (By similarity). Also able to transport other amino-acids, such as alanine (By similarity). May be indirectly involved in the transport of a component required for iron utilization into or out of the mitochondria (PubMed:11274051).[UniProtKB/Swiss-Prot Function]