

## Product datasheet for **MG224023**

### Synrg (NM\_001115009) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Synrg (NM_001115009) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Synrg
Synonyms:	AF007009; Ap1gbp1; C76297; L71-5; SYNG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG224023 representing NM_001115009 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGCTGCGGCCGGGAGCCGGAGCCAGCGGCGCGGGGGCGGGGCGGGGCCGGGGCCGGCGGGGCAGGCA  
GCTTCATGTTTCTGTTGCAGGCGGAATGAGACCCCTCAAGCAGGCTGATTCCAATGCAACAGCAAGG  
ATTCCTATGGTCTGTGCATGCAGCCCAATGCAAGGCATGATGGGAATGAATTACAGCTCTCAGATG  
TCCAAGGACCGATTGCAATGCAGGCAGGAATACCAATGGGCAATGCCAGCAGCGGGTGTGCCTTTCC  
TGGTCTCAGCCACCTTTCTGAGCATGCGTCTGCAGGCCACAGTACACTCCAGACATGCAGAAGCAGTT  
TGCAGGAGAGCAAAAAACGATTTGAACAACAACAAAAGCTCTTAGAAGAAGAAAAGAAAAGACGTCAG  
TTTGAAGAGCAAAAAGCAAAAGCTCAGACTTCTCAGCAGCGTGAAGCCCAAGACAGGAGAGAAGAACAGAG  
ACGATGCTTTGGAAGCCATAAAAGGAACTTGGATGGGTTTTCCAGAGATGCTAAGATGCACCCACTCC  
AGCATCACATCCAAGAAAACAGGCCCTTCTTGGAGAGAAGCTCCTAGTGTCTGTGATGTAAGTGCA  
TCCGGGCAGGAACACATAAAATTAACACTCCTGATGCTGGGCACAAAGCCATAGTCCAGGATCCAGTA  
AGAAGTCCCTGGTTTAAATGGCCATAACAGGGGTGCTGTGGATGGATGTGTGAGTGGTCCCGCCAGTGC  
AGAGGCAGAAAAGACTTCAGATCAAACCTGTCAAAGGAAGAGAGTGGTGTGGCGTGTTCCTCTCAG  
GACCTGCTCAGTCCAGAATGCCTCCTGGATTTACAATGAGAGTTTGGTCCAGATGCCATAAGAAAA  
TTTTAGAAACCACAATGACTCCAACCTGGAATAGATACTGCTAACTTTATCCATTCTGATGTCATCTGG  
ACTTCCAGGAACTCTCGACAGATATGGGCCTTAGCTAATCGAACCACACTGGCAGGCTCACTAAG  
GAGGAGCTTTACACGGTCTCGCCATGGTAGCAGTAACACAGAGGGGTGTTCTGCCATGAGCCCTGATG  
CTTTGAGCCAGTTCCTGCGGCTCCCATCCCTACCTTAAGCGGCTTCTATGACTCTGCCTACCCAGT  
GAGCCAGCCAACGGCGATGCCCTCTGGCCCTACAGGCTCCATGCCCTCACCCCTGGACAACCCATCATG  
GGTATCAACCTTGTGGACAGTGGGTGGAGCTGCAGCACCACCTCCAGTGGCTTCATGCCAGCCTACC  
CATCAAACAGGTGGGAAAGACAGAAGAAGATGACTTCCAGATTTTCAAGATGCTTCGAAATCAGGATC  
CATCGATGATTCCTTCACTGACTCCAAGAGATGCTGCTTCTCAAACCAGTAATCCAGCATGGA



[View online »](#)

AACAGTGCTCCATCACTCTTGATCCCATTTCCTGGAACCTAAAGCCTCCACAGACAAATACGCAGTGTTC  
AAGGGATTTCCACTGACAAGCCCTCTGAAAACCCCTGCTTCGTTTGGAGAGTCTGGTGATAAATACAGTGC  
TTTCAGGGAACCTCGAGCAAACGACAGACAGTAAACCTTTAGGAGAGAGCTTTGCCGAGTTCAGATCCACA  
GGAACCGATGATGGCTTCACTGACTTCAAGACCGCGATAGTGTGTACCCTAGAGCCACCCACAAAAG  
ACACTTTCCATCAGCTTTTGCCTCAGGAGCTGCACAGCAGACACAGACACAGGTGAAAACCCCTCTGAA  
CTTAGAAGATCTAGATATGTTCTCCTCAGTGGATTGCAGTGGCGAGAAAACAGGTGCCCTTTTCAGCTACA  
TTTAGCAGCAAAGTCCGTTTCCACTCGACCTCAGCCAGCGGGCTCTGCAGCAGCGTCAAGCAGTGG  
CATCCACTAAAACCTTCTAGTTTGGCAGATGATTTTGGAGAGTTCAACCTCTTTGGGGAGTATTCAAACCC  
TGCATCTGCTGGGGAGCAGGACGACTTTGCAGATTTTATGGCTTTCGGTAAACAGTCCATTTTCATCTGAG  
CCAAAAGCAAGTGACAAGTATGAAGCCCTCAGGGAGGAAGTGAAGTCCCAGCCCTTGTCCAGCAGCACTG  
TGAAGGGGCACAGCACCCACCTGCTGCGGCAACCAAGTATGATGTCTTCAAACAGCTGTCCCTAGAGGG  
CGCTGGGTGGCCATGGAGGAGTCAAAGAGAACAACCTTCTCCACCAAGAGTGAAGATGACTTTGCCGAC  
TTCCACTCCAGTAAATTCTCATCCAGAGCTCAGACAAAATCCCTGGGAGAGAAAGCCGTGGCTTTTCAGAC  
ATGCCAAAAGACTCCTCCTCGGTGAAGTCTTACAGCTCCCTCCATCGGTGGCAGCAGTGTGGCAA  
GGAGGACTCTGAAGATGCACTTTCTGTTCAATTTGACATGAAATTTGGCTGATGTGGGAGGAGATCTTAAG  
CATGTCTGTCTGATAGCTCTTTGGATTACCAACAGTTAGTGGCCAGCATCCTCCTGCCGAGATACAG  
AGGACTTAAGCTGTGCTGCTTTTGAAGCTGTAGTAGCCATTTTACAGTGAACACTTACAAGCTGTGA  
ATGGTCAGACAGGGCTGATGCACTTTCAGGGCAGAAAACCTCTCCATTTGTCTCTCAGCAGGAAGTAGG  
TCCTTTTCAGCCACCTCAAACCTTACACGAAAGAGATCTCATTGGCAGCTCTGAAAACATCACCATGT  
CATCTCTCTCAAAGGATCGCCCTTGGCCAGTGAAGGACGCTCTCCAGAGACTGCCTTCCAGCTTTTGC  
CAGCTTTAAAGACATGATGCCTCAGACCACTGAGCAGAAAAGATTTGAAAGTGGGACTTCCAGGATTTT  
ACCAGGCAGGACATGCCACGGTGGACCGCAGCAAGAAAACCTCATGTCCAAGCCCGCTTCCAGTGTGG  
CTTCGCACGAGACCCCAAGGAGGTGCAGACGACTTTGGAGAATTTCAAAGTGAAGTCCAAAATCAG  
CAAGTTTGACTTCTTAGTAGCTAATTCAGAGCAAAAATGAAATCCAGTGAAGAAATGATCAAAAGTGAAG  
CTGGCAACCTTTGACCTTTCTGTTCAAGGATCACACAAGAGGAGCTTGAAGCTTGGGGATAAAGAAATAA  
GCCGCTCTCTCCTTCCCGGCCCTGGAGCAGCCCTTTCAGAGACCGGTCCAACACTCTGAGTGAAGGGC  
TGGCTGCCCGTCCATCCGAGACAAGTACAAGGATCTCACTGGCGAGGTGGAGGAAAATGAGAGATACGCG  
TATGAGTGGCAGAGATGCCTAGGGAGCGCGCTGGATGTCATTAAGAAGGCAAATGACACCTTAAATGGCA  
TTAGCAGCAGTGTGTTGCACAGAAGTTATCCAGTGGCTCAAGGCATGGAGTATCTTCTAGGTGTGGT  
GGAAGTGTACCGGTAACCAAGCGTGTGGAGCTGGGGATAAAGCCACTGCTGTGTGTAGTGAGAAACTC  
CAGCAGTTGCTGAAGGACATCGATAAAGTGTGGAACAACCTAATCGGCTTCATGCACTTCCCACTCA  
CACCAGATGAGAATTCAGTGGATTTTCTCCTGTATGTTACGGCCCGGATCAAAAACGCTCAGGAGCT  
GGCTTGTGGAGTGTGCTCTTAAATGTGGACTCCAGGAGCCGAAAGAAGAGACGCTGCAGAAGAACAG  
CCTAAAAAAGCATTCAACTCGGAGACAGACAGCTTCAAGCTGGCTACGGAGGACACCAGTACCACGCCA  
GCTGTGCCAACTTCTGGATCAACTGTGTTGAACCAAGCCTCCCGGCCCTCTTTCAGATCTGCTC

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG224023 representing NM\_001115009  
 Red=Cloning site Green=Tags(s)

MALRPGAGASGAAGAGAGPGGAGSFMFPVAGGMRPPQAGLIPMQQGGFPMVSVMQPNMQMMGMNYSSQM  
 SQGPIAMQAGIPMGMPAAAGVFLGQPPFLSMRPAGPQYTPDMQKQFAEEQQRFEQQKLLLEEERKRRQ  
 FEEQKQLRLLSSVKPKTGEKNRDDALEAIKGNLDGFSRDAKMHPPTASHPKKQGPSLEEKLLVSCDVSA  
 SGQEHIKLNTPDAGHKAIVPGSSKNCPGLMAHNRGAVDGCVSGPASAEAEKTSQDTLSKEESGVGVFVPSQ  
 DPAQSRMPPWIYNESLVPDAYKILETTMTPTGIDTAKLYPILMSSGLPRETLGQIWALANRTTPGRLTK  
 EELYTVLAMVAVTQRGVPAMSPDALSQFPAAPIPTLSGFPMTLPTVVSQPTAMPSSGPTGSMPPLTGQPI  
 GINLVGPVGGAAAPTSSGFMPAYPSNQVGKTEEDDFQDFQDASKSGSIDDSFTDFQEMPASSKTSNSQHG  
 NSAPSLIPFPGKASTDKYAVFKGISTDKPENPASFGESGDKYSAFRELEQTTSKPLGESFAEFRST  
 GTDDGFTDFKTAADSVSLEPPTKDTFPSAFASGAAQQTQTQVKTPLNLEDLDMFSSVDCSCEKQVFPFSAT  
 FSTAKSVSTRPQPAGSAAASAALASTKTSLLADDFGEFNLFGYSNPASAGEQDDFADFMAFGNSSISSE  
 PKASDKYEALREEVSPSPLSSSTVEGAQHPPAAATKYDVFQKLSLEGAGLAMEEFKENTSSTKSEDDFAD  
 FHSSKFSSTSSDKSLGEKAVAFRHAKEDSSSVKSLDLPISIGSSVKGEDSEDALSVQFDMKLADVGGDLK  
 HVMSDSSLDLPTVSGQHPPAADTEDLSAAFGSCSSHFTVSTLTSCWEADRADALQGRKLSFVLSAGSR  
 SFSATSNLHTKEISFGSSENITMSSLKSGSALASEDALPETAFFAFASFDMMPQTTEQKEFESGDFQDF  
 TRQDMPTVDRSQETSCPSPASSVASHETPKEGADDFGEFQSEKISKDFLVANSQSKMKSSSEMIKSE  
 LATFDLSVQGSCHKRSLSLGDKEISRSSPALEQPFDRDRNTLSERAALPVIRDKYKDLTGEVEENERYA  
 YEWQRCLGSALDVIKKANDTLNGISSAVCTEVIQSAQMEYLLGVVEVYRVTKRVELGIKATAVCSEKL  
 QQLLKIDKVVNNLIGFMSLATLTPDENSLDFSSCMLRPGIKNAQELACGVCLLNVDSSRSRKEETPAEEQ  
 PKKAFNSETDSFKLAYGGHGYHASCANFWINCVEPKPPGLLLPDL

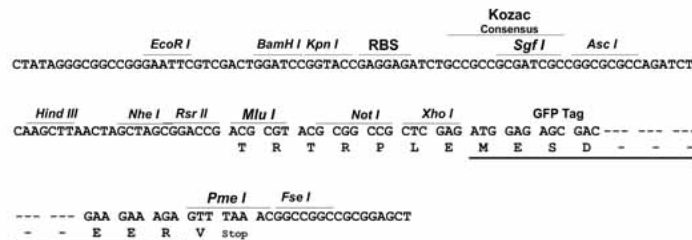
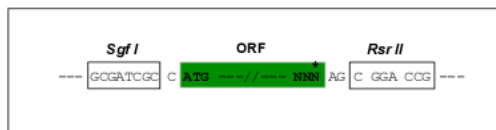
SGPTRRRLE - GFP Tag - V

Restriction Sites:

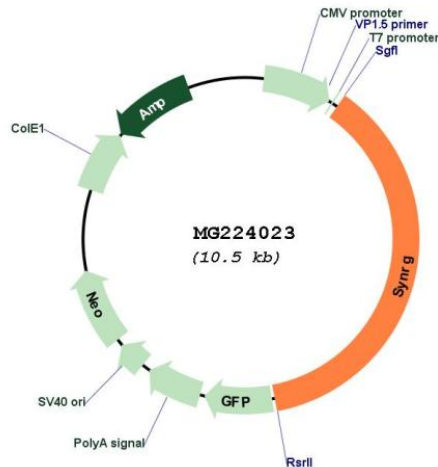
SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_001115009

ORF Size: 3918 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\\_001115009.1](#), [NP\\_001108481.1](#)

RefSeq Size: 3995 bp

RefSeq ORF: 3921 bp

Locus ID: 217030

Cytogenetics: 11 C

**Gene Summary:**

May play a role in endocytosis and/or membrane trafficking at the trans-Golgi network (TGN).  
May act by linking the adapter protein complex AP-1 to other proteins (By similarity).  
[UniProtKB/Swiss-Prot Function]