

## Product datasheet for **MG219895**

### **Spg7 (NM\_153176) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Spg7 (NM_153176) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Spg7
Synonyms:	AI452278; AU015315; Cmar; PGN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MG219895 representing NM\_153176  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCGGCCGCTTGCTGCTGCTTCGCGGGCTCCGCCCGGCCGGAGCCCGGCCCGACGGCTGTGGG  
GCCTGCTCTCAGGCAGGGGCCAGGCTCTCGTCCGGGGCTGGGGCCAGGCGGCCGTACGCGGCCCGCGG  
GACTCCGGTTGGCCCGGCTGCGGCTGGAGGCCACGCGCCTCAGAGTTTGTATTGCGAATACTGACCCCT  
AGCTTTGAAGGTATTAGCGGATTGTTACTGAAACAGCATATAGTTCCAAATGCAGTCAGACTGTGGCCGC  
TTTCAGGTAGCACTTTGTATTTAACACCTCAAGGATGAAGCAGAAGAATAAAGACAATGATAAACCCAA  
AGGCAAGACCCCTGAAGATGATGAAGAAGAGAAGAGACGAAAAGAGCGGGAAGACCAGATGTACCGAGAG  
AGGCTGCGCACCCCTGTTTCATCATTGCTCTTGTGCATGAGCCTGCTGAACCTCCTCAGTACAAGTGGGGCA  
GTATTTCTGGTCTGACTTTGTCAACGAGATGCTGGCTAAAGGCGAGGTGCAGCGTGTGCAGGTGGTGCC  
CGAGAGTGATGTGGTGAAGTCTATCTGCATCCTGGAGCTGTGGTGTGGGGCGGCTCGGCTGGCCCTG  
ATGTATCGGATGCAGGTTGCAAACATCGACAAATTTGAAGAGAAGCTTCGAGCAGCCGAAGTGAACCTGA  
ACATTGAGAGCAAGGACAGGATCCCGTGTCTACAAGCGGACAGGATCTTTGGGAATGCCCTCTACGC  
CCTGGGGATGACAGCCGTGGGCTTGCCATCCTGTGGTATGTTTTCAGACTGGCGGGATGACCGGAAGG  
GAAGGCGGATTAGTGTCTTTAATCAGCTTAAGATGGCACGTTTACCATTGTGGACGGGAAGACAGGGA  
AAGGAGTCAGCTTCCAAGATGTGGCAGGAATGCATGAAGCCAAGCTGGAAGTCCGAGAATTTGTGGATTA  
TCTGAAGAGCCCAGAGCGTTTCTTCAGCTCGGTGCCAAGGTTCCAAAGGTGCCCTGTTGCTGGGGCC  
CCTGGCTGTGGGAAGACGCTGTTGGCCAAGGCAGTAGCCACGGAGGCTCAGGTGCCCTTTTAGCAATGG  
CTGGCCAGAGTTTGTGGAGGTGATTGGAGGCTGGGAGCTGCCGAGTGCGAAGCCTCTCAAGGAGGC  
ACGAGCCAGGGCCCTTGATAGTGTACATTGATGAGATCGATGCTGTGGGAAAGAAGCGCTCCACCTCC  
ATGCTGTGGTTCTCCAACACGGAAGAGGAGCAGACCCTCAACCAGCTCCTGGTGGAGATGGACGGAATGG  
GCACCACAGACCATGTCACTCGTCTTGGCATCCACCAATCGAGCTGATGTTCTGGACAATGCTCTGATGAG  
GCCTGGGCGGCTCGACAGGCATGTCTTCATTGATCTTCCACGCTCCAGGAGAGGGCGGAGATTTTCGAG  
CAGCACCTGAAAGGCTGAAGTTGACCCAGCCAGCAGTTTTTACTCCAGCGGCTGGCAGAGCTGACAC  
CTGGATTAGTGGCGCCGACATCGCAACATCTGCAACGAGGCCGCTCTGCACGCTGCACGCGAGGGGCA  
CACGTCCTGCACACGTTCAACTTTGAGTATGCCGTGGAGCGGCTCATTGCTGGTACTGCTAAAAAGAGT  
AAGATCCTCTCCAAGGAGGAGCAGAGAGTGGTCGCCTTCCATGAGTCTGGCCATGCCTTGGTTGGTTGGC  
TGCTGGAGCACACAGAGGCTGTGATGAAGTCTCCATCGCACCTCGGACAACGCTGCTTTGGGCTTCTC  
TCAGATGCTCCCTCGGGACCAAGTACCTCTTCAACCAAGGAGCAGCTGTTTGGAGCGATGTGCATGGCCCTA  
GGTGGCCGTGCAGCTGAAGCCATCTCATTAGCAGGGTCACTCTGGGGCCAGGATGATTTGAGGAAGG  
TTACCCGATTGCTTACTCCATGGTGAACAGTTCCGGATGGCTCCCAGCATTGGGCTGTATCCTTCCC  
CGAGGCACAAGAGGGCTCATGGCATTGGACGTCGTCCTTCCAGCCAGGGCCTCCAGCAGATGATGGAC  
CATGAAGCAAAGCTGCTGGTGGCCAAAGCCTACAGACACCCGAGAAGGTGCTGCTAGACAACCTGGACA  
AGCTGCAGGCGTTGGCGAATGCCCTTCTGAAAAGGAAGTATAAACTATGAGGACATTGAGGCGCTCAT  
TGGCCCGCCCATGGGCCAAAGAAAATGATTGCACCACAGAAATGGATTGATGCTGAAAAGGAGAGA  
CAGGCCTCAGGGAGGAGGAGGCTCCGGCTCCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG219895 representing NM\_153176  
 Red=Cloning site Green=Tags(s)

```

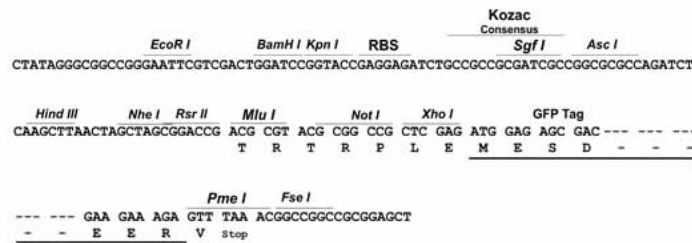
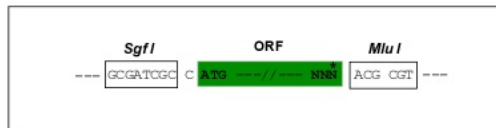
MAAALLLLRGLRPGPEPRRRLWLLSGRGPGLSSGAGARRPYAARGTPVGPAAAGGHAPQSLLLRILTP
SFEGISGLLLKQHIVPNAVRLWPLSGSTLYFNTRMKQKNKDNDKPKGKTPEDDEEEKRRKEREDQMYRE
RLRRLFIIALVMSLLNSLSTSGGSISWSDFVNEMLAKGEVQRVQVVPESDVVEVYLHPGAVVGRPRRAL
MYRMQVANIDKFEEKLRAAEDELNIESKDRIPVSYKRTGFFGNALYALGMTAVGLAILWYVFRLAGMTGR
EGGFSAFNQLKMARFTIVDGKTGKGVSFQDVAGMHEAKLEVREFVDYLKSPERFLQLGAKVPGALLLGP
PGCGKTL LAKAVATEAQVPFLAMAGPEFVEVIGGLGAARVRSLFKEARARAPCIVYIDEIDAVGKKRSTS
MSGFSNTEEEQTLNQLL VEMDGMGTTDHVIVLASTNRADVLDNALMRPGR LDRHVFIDLPTLQERREIFE
QHLKGLKLTQPSSFYSQRLAELTPGFSGADIANICNEAALHAAREGHTSVHTNFNEYAVERVIAGTAKKS
KILSKEEQRVVAFHESGHALVGWLL EHTAEMKVSIAPRNAALGFSQMLPRDQYLF TKEQLFERMCMAL
GGRAAEAISFSRVTSQAQDDLKRVTRIAYSMVKQFGMAPSIGPVSFPEAQEGLMGI GRRPFSQGLQQMMD
HEAKLLVAKAYRHTEKVLLDNLDKLQALANALLEKEVINYEDIEALIGPPPHGPKKMIAPQKWIDAEKER
QASGEEEEAPAP
  
```

TRTRPLE - GFP Tag - V

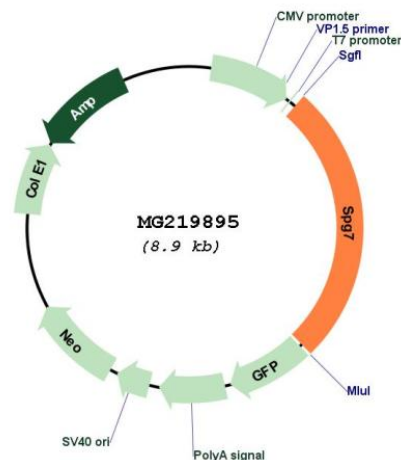
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



## Plasmid Map:



ACCN: NM\_153176

ORF Size: 2343 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\\_153176.4](#), [NP\\_694816.3](#)

RefSeq Size: 2558 bp

RefSeq ORF: 2346 bp

Locus ID: 234847

UniProt ID: [Q3ULF4](#)

Cytogenetics: 8 E1

**Gene Summary:**

ATP-dependent zinc metalloprotease. Plays a role in the formation and regulation of the mitochondrial permeability transition pore (mPTP) and its proteolytic activity is dispensable for this function (By similarity).[UniProtKB/Swiss-Prot Function]