

Product datasheet for **RR201761**

Spg7 (NM_181388) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Spg7 (NM_181388) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Spg7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RR201761 representing NM_181388
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGCCGCGTTGCTGCTGCTTCGCGCGCTCCGCCAGAGCCCGGAGCCCGGCCCTGGCGGCTGTGGG
 CCCAGCTCTCAGGCAGGAGCCCCGGCCTTCTCCGGGGCCGGCGGTAGGCGGCCGTACGTAGTCCGTGG
 GACTCCGATTGGCCTGGCTGCGGCTGGAGGCCACACGCCTCAGAGCTTGCTATTGCGAATACTGACCCCT
 AGCTTTGAAGGTGTTAGCGGATTGTTACTGAAACGGCATATAGTTCCAAGTGCAATCAGACTGTGGCAGC
 TTTTAGGTAGTACTTTGTATTTAACACCTCAGGGTTGAAGCAGAAGAACAAGATGATGATAAACCCAA
 AGGCAAAGCCCCGAAGATGACGAAGAAGAGAGGAGCGGAAGGAGCGGAAGACCAGATGTACCGGGAG
 AGGCTGCGCACCTTGTTTCATCATCGCCATCGTGATGAGCCTGCTCAACTCCCTCAGCACAAGTGGCGGA
 GCATCTCCTGGGCTGACTTCGTCACAGAGATGCTGGCTAAAGGCGAGGTGCAGCGTGTGCAGGTGGTCC
 CGAGAGTGATGTGGTGAAGTCTACCTGCATCCAGGAGCTGTGGTGTGGGCGGCCCTCGGCTGGCCTTG
 ATGTACCGGATGCAGGTTGCAAACATCGACAAATTTGAAGAGAAGCTTCGAGCTGCTGAAGATGAACTGA
 ACATCGAGAGCAAGGACAGGATCCCGTGTCTACAAGCGGACAGGATCTTTGGAAATGCCCTCTATGC
 CCTGGGGATGACTGCAGTGGGCTTGCCATCCTGTGGTATGTTTTCAGACTGGCTGGGATGACCGGAAGG
 GAAGGCGGATTAGTGCCTTTAATCAGCTTAAATGGCGCGCTTACCATCGTGGACGGGAAGACGGGGA
 AAGGAGTCAGCTTCCAGGATGTGGCGGGAATGCACGAAGCAAGCTGGAAGTCCGAGAGTTTGTGGATTA
 TCTGAAGAGCCCCGAGCGCTTCCCTCAGCTGGGTGCCAAGGTTCCAAAGGTGCCCTGCTGCTGGGACCC
 CCTGGTGTGGGAAGACGCTGTTGGCCAAGGCAGTGGCCACGGAGGCTCAGGTGCCCTTTTAGCAATGG
 CTGGCCCCAGAGTTTGTGGAGGTCATTGGAGGCCCTGGGAGCCGCCGAGTGCAGCCTCTCAAGGAAG
 CCGGGCCAGGGCCCTTGCATTGTGTACATTGATGAGATCGATGCTGTGGGGAAGAAGCGCTCCACCTCC
 ATGTCCGGGTTCTCCAACACAGAAGAGGAGCAGACCCTCAACCAGCTCCTCGTAGAGATGGACGGAATGG
 GCACCGCAGACCAGTCACTCGTCTTGGCATCCACCAACCGAGCCGATGTCTGGACAACGCTCTGATGAG
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 CAGCACCTGAAAGGCTCAAGTTGACCCAGCCAGCAGTTTTTACTCCAGCGGCTGGCAGAGCTGACTC
 CTGGATTAGTGGAACTGCTAAAAAGATAAGATCCTTTCCAAGGAGGAGCAGAGAGTGGTTGCTTTCCA
 TGAGTCTGGCCATGCCCTGGTTCGGTGGCTGCTGGAACACACGGAGGCTGTGATGAAGTCTCCATAGCA
 CCTCGGACAAACGCTGCTCTGGGCTTCTCTCAGATGCTCCCTCGGACCAGTACCTTTCCACCAAGGAGC
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 CTCTGGGGCCAGGATGATTTGAGGAAGGTTACCCGTATCGCCTACTCCATGGTGAACAGTTTGGGATG
 GCTCCTAGCATTGGGCCCGTATCCTTCCCTGAGGCACAAGAGGGCCTCGTGGGCATTGGACGCCCTCCCT
 TCAGCCAGGCTCTCCAGCAGATGATGGACCATGAAGCAAGACTGCTGGTGGCCAGAGCCTACAGACACAC
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 ATAAACTATGAGGACATTGAGGCGCTCATTGGCCCGCCGCCCATGGCCAAAGAAAATGATTGCACCAC
 AGAAATGGATTGATGCTGAAAAGGAGAAACAAGCCTCAGGGGAGGAGGAGGCTCCGGCTCCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR201761 representing NM_181388
 Red=Cloning site Green=Tags(s)

MAAALLLRLALRQSPEPGPWRLWAQLSGRSPGLFSGAGGRRPYVVRGTPIGLAAAGGHTPQSLLLRILTP
 SFEGVSGLLLLKRHIVPSAIRLWQLSGSTLYFNSTGLKQKNKDDDKPKGKAPEDDEEERRRKEREDQMYRE
 RLRTLFIIAIVMSLLNSLSTSGGSISWADFNEMLAKGEVQRVQVVPESDVVEVYLHPGAVVFGPRRLAL
 MYRMQVANIDKFEEKLRAAEDELNIESKDRIPVSYKRTGFFGNALYALGMTAVGLAILWYVFRLAGMTGR
 EGGFSAFNQLKMARFTIVDGKTGKGVSFQDVAGMHEAKLEVREFVDYLKSPERFLQLGAKVPGALLLGP
 PGCCKTLLAKAVATEAQVPFLAMAGPEFVEVIGGLGAARVRSLFKEARARAPCIVYIDEIDAVGKKRSTS
 MSGFSNTEEEQTLNQLL VEMDGMGTADHVIVLASTNRADVLDNALMRPGRDRHVFIDLPTLQERREIFE
 QHLKGLKLTQPSSFYSQRLAELTPGFSGTAKSKILSKEEQRVVAFHESGHALVGWLEHTEAVMKVYSIA
 PRTNAALGFSQMLPRDQYLF TKEQLFERMCMLGGRAAEAISFSRVTSQAQDDLKRVTRIAYSMVKQFGM
 APSIGPVSFPEAQEGLVGIGRRPFSQGLQQMDHEARLLVARAYRHTEKVLLDNLDKQLALANALLEKEV
 INYEDIEALIGPPPHGPKKMIAPQKWIDAEKEKQASGEEEEAPAP

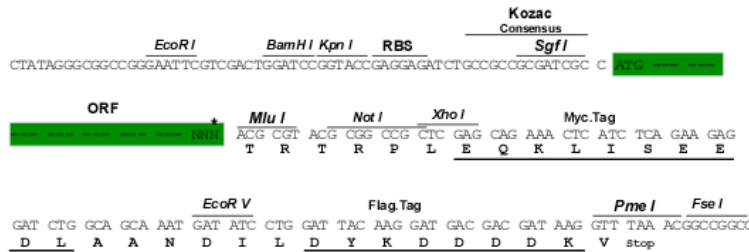
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_181388

ORF Size: 2232 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_181388.2](#), [NP_852053.1](#)

RefSeq Size: 2479 bp

RefSeq ORF: 2235 bp

Locus ID: 353231

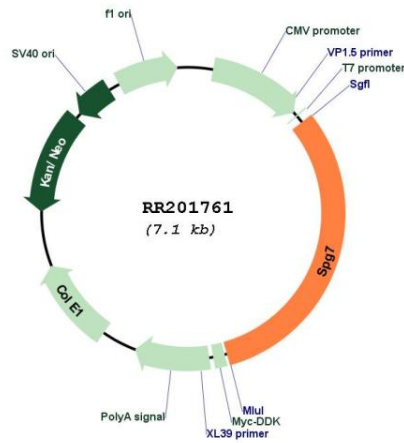
UniProt ID: [Q7TT47](#)

Cytogenetics: 19q12

MW: 82.1 kDa

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 (PubMed:26387735).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR201761