

Product datasheet for **SC126532**

SPG7 (NM_003119) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPG7 (NM_003119) Human Untagged Clone
Tag:	Tag Free
Symbol:	SPG7
Synonyms:	CAR; CMAR; PGN; SPG5C
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_003119, the custom clone sequence may differ by one or more nucleotides

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ATGGCCGTGCTGCTGCTGCTGCTCCGTGCCCTCCGCCGGGTCCAGGCCCGGGTCTCGGCCGCTGTGGG
GCCAGGCCCGCCGCTGGAGTCCAGGGTCCCGCCAGGCCCGGGAGGGGGCGGCCGTACATGGCCAGCAG
GCCTCCGGGGGACCTCGCCGAGGCTGGAGGCCGAGCTTCGACAGCTTACAATTGAGACTGCTAACCCT
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TTTTAGGTGTTACTTTCTATTTTAAACACCTCAAGGTTGAAGCAGAAGAATAAGGAGAAGGATAAGTCGAA
GGGAAGGCGCCTGAAGAGGACGAAGAGGAGAGGAGACGCCGTGAGCGGGACGACCAGATGTACCGAGAG
CGGCTGCGCACCTTGCTGGTTCATCGCGTTGTCATGAGCCTCTGAATGCTCTCAGCACCAGCGGAGGCA
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ATGTACCGAATGCAGTTGCAAAATTTGACAAGTTTGAAGAGAAGCTTCGAGCAGCTGAAGATGAGCTGA
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CCGAGCCGGGCCCTTCATCGTCTACATCGATGAGATCGACGCGGTGGCAAGAAGCGCTCCACCACC
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CAGGATTCAGTGGGGCTGACATCGCAACATCTGCAATGAGGCTGCGCTGCACGCGGCGGGAGGGGACA
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AAGATCCTGTCCAAGGAAGAACAGAAAGTGGTTGCGTTTTCATGAGTCGGGCCACGCCTTGGTGGGCTGGA
TGCTGGAGCACACGGAGGCCGTGATGAAGTCTCCATAACCCCTCGGACAAACGCCGCCCTGGGCTTTGC
TCAGATGCTCCCCAGAGACCAGCACCTTTCACCAAGGAGCAGCTGTTTGAGCGGATGTGCATGGCCCTG
GGAGGACGGGCCCTCGGAAGCACTGTCTTCAACGAGGTCACCTTCTGGGGCACAGGACGACCTGAGGAAGG
TACCCCGCATCGCTACTCCATGGTGAAGCAGTTTGGGATGGCACCTGGCATCGGGCCCATCTCCTTCCC
TGAGGCGCAGGAGGGCCTCATGGGCATCGGGCGGCGCCCTTTCAGCCAAGGCCTGCAGCAGATGATGGAC
CATGAAGCAAGACTGCTGGTGGCCAAGGCCTACAGACACACCGAGAAGGTGCTGCAGGACAACCTGGACA
AGTTGCAGGCGCTGGCAAACGCCCTTCTGGAAAAGGAAGTGATAAACTATGAGGACATTGAGGCTCTCAT
TGGCCCCCGCCCATGGGCCGAAGAAAATGATCGCACCCGAGAGGTGGATCGACGCCAGAGGGAGAAA
CAGGACTTGGGCGAGGAGAGACCGAAGAGACCCAGCAGCCTCCACTTGGAGGCGAAGAGCCGACTTGGC
CCAAGTAG
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_003119 unedited GCATTTGTATACGACTCATATAGGGCGGCCGCAATTCGCACGAGGTGGCCGTGCTGCTG CTGCTGCTCCGTGCCCTCCGCCGGGTCCAGGCCCGGGTCTCGGCCGCTGTGGGGCCCA GGCCCCGGCTGGAGTCCAGGGTTCCCGCCAGGCCCGGGAGGGGGCGGCCGTACATGGCC AGCAGGCCCTCCGGGGACCTCGCCGAGGCTGGAGGCCGAGCTCTGCAGAGCTTACAATTG AGACTGCTAACCCCTACCTTTGAAGGGATCAACGGATTGTTGTTGAAACAACATTTAGTT CAGAATCCAGTCAGACTCTGGCAACTTTTAGGTGGTACTTTCTATTTTAAACACCTCAAGG TTGAAGCAGAAGAATAAGGAGAAGGATAAGTCAAGGGGAAGGCCCTGAAGAGGACGAA GAGGAGAGGAGACGCCGTGAGCGGGACGACCAGATGTACCGAGAGCGGCTGCGCACCTTG CTGGTCATCGCGTTGTGATGAGCCTCCTGAATGCTCTCAGCACCAGCGGAGGCAGCATT TCCTGGAACGACTTTGTCCACGAGATGCTGGCCAAGGGCGAGGTGCAGCGCGTCCAGGTG GTGCTGAGAGCGACGTGGTGAAGTCTACCTGCACCCTGNAGCCGTGGTGTGGGGCGG CCTCGGCTAGCCTTGATGTACCGAATGCANGTTGCAAATATTGACAAGTTTGAAGAGAAG CTTCGAGCAGCTGAAGATGAGCTGAATATCGAGGCCAAGGACAGGATCCCCAGTTTCTTA CAAGCGAACAGGATTCTTTGGNAATGCCCTGTACTCTGTGGGGGATGACNGGCAGTGGGC CTGGCCATNCTGTGGGTATGGTTTTTCGTCTGGCCCGGATAACTGAAAGGGAAGGGGGG AATCAATTGCCTTAAATCAG
Restriction Sites:	NotI-NotI
ACCN:	NM_003119
Insert Size:	3000 bp
OTI Disclaimer:	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.
	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
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_003119.2 , NP_003110.1
RefSeq Size:	3096 bp

RefSeq ORF: 2388 bp

Locus ID: 6687

UniProt ID: [Q9UQ90](#)

Cytogenetics: 16q24.3

Domains: Peptidase_M41, AAA, AAA

Protein Families: Protease, Transmembrane

Gene Summary: This gene encodes a mitochondrial metalloprotease protein that is a member of the AAA family. Members of this protein family share an ATPase domain and have roles in diverse cellular processes including membrane trafficking, intracellular motility, organelle biogenesis, protein folding, and proteolysis. Mutations in this gene cause autosomal recessive spastic paraplegia 7. Two transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Mar 2014]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).