

Product datasheet for **RC225949**

SPG3A (ATL1) (NM_001127713) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPG3A (ATL1) (NM_001127713) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SPG3A
Synonyms:	AD-FSP; atlastin1; FSP1; GBP3; HSN1D; SPG3; SPG3A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC225949 representing NM_001127713
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCAAGAACCGCAGGGACAGAAACAGTTGGGGTGGATTTTCGGAAAAGACATATGAATGGAGCTCAG
 AAGAGGAGGAGCCAGTGA AAAAGGCAGGACCAGTCCAAGTCTCATTGTCAAAGATGACCATTCTTTGA
 GTTAGATGAAACTGCATTA AATCGGATCCTTCTCTCGGAGGCTGTCAGAGACAAGGAGGTTGTTGCTGTA
 TCTGTTGCTGGAGCATTAGAAAAGGAAAATCATTCTGATGGACTTCATGTTGAGATACATGTACAACC
 AGGAATCAGTTGATTGGGTTGGAGACTACAATGAACCATGACTGGTTTTTCATGGAGAGGTGGATCTGA
 GCGAGAGACCACAGGAATTCAGATATGGAGTGA AATCTTCCTTATCAATAAACCTGATGGTAAAAAGGTT
 GCAGTGTATTGATGGATACTCAGGGAACCTTTGATAGTCAGTCAACTTTGAGAGATTACGCCACAGTAT
 TTGCCCTTAGCACAATGATCAGCTCAATACAGGTATATAACTTATCCCAAAATGCCAGGAGGATGATCT
 TCAGCACCTCCAGCTTTTCACTGAGTATGGCAGACTGGCAATGGAGGAAACATTCCTGAAGCCATTTTCAG
 AGTCTGATATTTCTTGTTCGAGACTGGAGTTTCCCATACGAATTTTCATATGGAGCCGATGGTGGTGCCA
 AATTTCTGGAAAAACGCCTCAAGGTCTCAGGGAACAGCATGAAGAACTACAGAACGTCAGAAAACACAT
 CCATTCCTGTTTCACCAACATTTCTGTTTTCTGCTACCTCATCTGGCTTAAAAGTAGCTACCAATCCA
 AACTTTGATGGAAAATTGAAAGAAATAGATGATGAATTCATCAAAAACCTGAAAATACTGATTCCTTGGC
 TACTTAGTCCCGAGAGCCTAGATATTAAGAGATCAATGGGAATAAAATCACCTGCCGGGGTCTGGTGGA
 GTACTTCAAGGCTATATAAAGATCTATCAAGGTGAAGAATTACCACATCCCAATCCATGTTACAGGCC
 ACAGCAAGACTAACAAATTTAGCAGCCGTGGCAACTGCCAAGGACACATAACAACAAAAAATGGAAGAGA
 TTTGTGGTGGTGACAAACCATTTCTGGCCCCAAATGACTTGCAGACCAAAACACCTGCAACTTAAGGAAGA
 ATCTGTGAAGCTATTCGAGGGGTGAAGAAGATGGGTGGGGGAAGAATTTAGCCGGCGTTACTGTCAGCAG
 TTGGAGAGTGAATAGATGAACCTTACATCCAATATATCAAGCACAATGATAGCAAAAATATCTTCCATG
 CAGCTCGTACCCAGCCACACTGTTGTAGTCATCTTTATCACATATGTGATTGCTGGTGTGACTGGATT
 CATTGGTTGGACATCATAGCTAGCCTATGCAATATGATAATGGGACTGACCCTTATCACCTGTGCACT
 TGGGCATATATCCGCTACTCTGGAGAATACCGAGAGCTGGGAGCTGTAATAGACCAGGTGGCTGCAGCTC
 TGTGGGACCAGGCTTTGTACAAGCTTTACAGTGCAGCAGCAACCCACAGACATCTGTATCATCAAGCTTT
 CCCTACACCAAAGTCGGAATCTACTGAACAATCAGAAAAGAAAAAATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC225949 representing NM_001127713
 Red=Cloning site Green=Tags(s)

MAKNRRDRNSWGGFSEKTYEWSSEEEEPVKAGPVQVLIKDDHSFELDETALNRILLSEAVRDKEVVAV
 SVAGAFRKGKSF LMFMLRYMYNQESVDWVGDYNEPLTGF SWRGGSERETTGIQIWIWSEIFLINKPDGKKV
 AVLLMDTQGTQFDSQSTLRDSATVFALSTMISSIQVYNLSQNVQEDDLQHLQLFTEYGR LAMEETFLKPFQ
 SLIFLVRDWSFPYEF SYGADGGAKFLEKRLKVSNGNQEELQNVKRKHIHSCFTNISCFLLPHPLKVA TNP
 NFDGKLEIDDEFIKNLKILIPWLLSPESLDIKEINGNKITCRGLVEYFKAYIKIYQGEELPHPKSMLQA
 TAEANLAAVATAKDTYNKMEEICGGDKPFLAPNDLQTKHLQLKEESVKLFRGVKMGGEESRRYLQQ
 LESEIDELIYIQYIKHNSKNIFFHAARTPATLFVVIFITYVIAGVTGFIGLDIIASLCNMIMGLTLITLCT
 WAYIRYSGEYRELGAVIDQVAAALWDQALYKLYSAAATHRHLYHQAFPTPKSESTEQSEKKKM

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8066_h09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001127713

ORF Size: 1659 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_001127713.1](#), [NP_001121185.1](#)

RefSeq Size: 2821 bp

RefSeq ORF: 1662 bp

Locus ID: 51062

UniProt ID: [Q8WXF7](#)

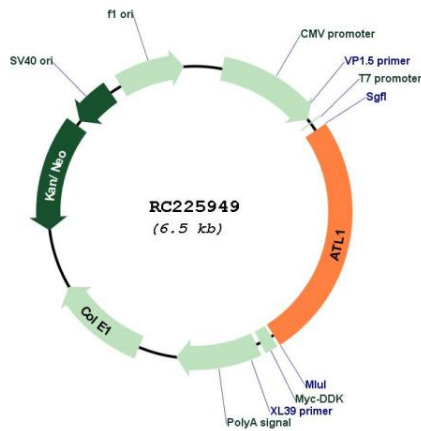
Cytogenetics: 14q22.1

Protein Families: Druggable Genome, Transmembrane

MW: 63.1 kDa

Gene Summary: The protein encoded by this gene is a GTPase and a Golgi body transmembrane protein. The encoded protein can form a homotetramer and has been shown to interact with spastin and with mitogen-activated protein kinase kinase kinase 4. This protein may be involved in axonal maintenance as evidenced by the fact that defects in this gene are a cause of spastic paraplegia type 3. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC225949