

Product datasheet for **SC317947**

SPG3A (ATL1) (NM_181598) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPG3A (ATL1) (NM_181598) Human Untagged Clone
Tag:	Tag Free
Symbol:	ATL1
Synonyms:	AD-FSP; atlastin1; FSP1; GBP3; HSN1D; SPG3; SPG3A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

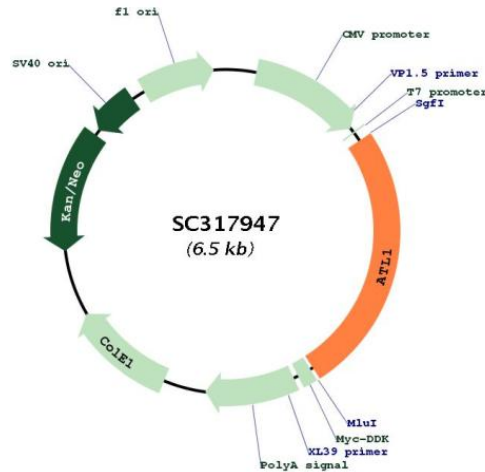


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Fully Sequenced ORF: >SC317947 representing NM_181598.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGCCAAGAACCGCAGGGACAGAAACAGTTGGGGTGGATTTTCGGAAAAGACATATGAATGGAGCTCA
GAAGAGGAGGAGCCAGTAAAAAGGCAGGACCAGTCCAAGTCTCATTGTCAAAGATGACCATTCCTTT
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ATGTAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites: Sgfl-Mlul

Plasmid Map:


ACCN: NM_181598

Insert Size: 1662 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_181598.3](#)

RefSeq Size: 2637 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]
Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (b) has the same N- and C-termini but is shorter compared to isoform a. Variants 2 and 3 both encode isoform b.