

Product datasheet for **SC319218**

Secretogranin V (SCG5) (NM_003020) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Secretogranin V (SCG5) (NM_003020) Human Untagged Clone
Tag:	Tag Free
Symbol:	Secretogranin V
Synonyms:	7B2; P7B2; SGNE1; SgV
Mammalian Cell Selection:	Neomycin
Vector:	<u>PCMV6-Neo</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_003020, the custom clone sequence may differ by one or more nucleotides

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ATGGTCTCCAGGATGGTCTCTACCATGCTATCTGGCCTACTGTTTTGGCTGGCATCTGGATGGACTCCAG  
CATTTGCTTACAGCCCCGGACCCCTGACCGGGTCTCAGAAGCAGATATCCAGAGGCTGCTTCATGGTGT  
TATGGAGCAATTGGGCATTGCCAGGCCCGAGTGAATATCCAGCTCACCAGGCCATGAATCTTGTGGGC  
CCCCAGAGCATTGAAGGTGGAGCTCATGAAGGACTTCAGCATTTGGGTCCTTTTGGCAACATCCCCAACA  
TCGTGGCAGAGTTGACTGGAGACAACATTCCTAAGGACTTTAGTGAGGATCAGGGGTACCCAGACCTCC  
AAATCCCTGTCTGTTGAAAAACAGATGATGGATGTCTAGAAAAACCCCTGACACTGCAGAGTTCAGT  
CGAGAGTTCAGTTGCACCAGCATCTCTTTGATCCGGAACATGACTATCCAGGCTTGGGCAAGTGAACA  
AGAAACTCCTTTACGAGAAGATGAAGGGAGGAGAGACGAAAGCGGAGGAGTGCAATCCATATCTACA  
AGGACAGAGACTGGATAATGTTGTTGCAAAGAAGTCTGTCCCCCATTTTTCAGATGAGGATAAGGATCCA  
GAGTAA
```

Restriction Sites:	EcoRI-XhoI
ACCN:	NM_003020



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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](#)

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_003020.3](#), [NP_003011.1](#)

RefSeq Size: 1241 bp

RefSeq ORF: 636 bp

Locus ID: 6447

UniProt ID: [P05408](#)

Cytogenetics: 15q13.3

Protein Families: Secreted Protein

Gene Summary:

This gene encodes a secreted chaperone protein that prevents the aggregation of other secreted proteins, including proteins that are associated with neurodegenerative and metabolic disease. The encoded protein may be best known for its role in the trafficking and activation of prohormone convertase PC2 (encoded by Gene ID: 5126). Phosphorylation of the encoded protein has been shown to have an inhibitory effect on its chaperone function. This gene also produces a ARHGAP11A-SCG5 readthrough transcript and ARHGAP11A-SCG5 protein. [provided by RefSeq, Feb 2019]

Transcript Variant: This variant (2) uses an alternate in-frame splice junction compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is 1 aa shorter compared to isoform 1.