

Product datasheet for **RC226541**

Secretogranin V (SCG5) (NM_001144757) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Secretogranin V (SCG5) (NM_001144757) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Secretogranin V
Synonyms:	7B2; P7B2; SGNE1; SgV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<p>>RC226541 representing NM_001144757</p> <p>Red=Cloning site Blue=ORF Green=Tags(s)</p>

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGTCTCCAGGATGGTCTCTACCATGCTATCTGGCCTACTGTTTGGCTGGCATCTGGATGGACTCCAG
 CATTTGCTTACAGCCCCGACCCCTGACCGGTCTCAGAAGCAGATATCCAGAGGCTGCTTCATGGTGT
 TATGGAGCAATTGGCATTGCCAGGCCCGAGTGAATATCCAGCTCACCAGGCCATGAATCTTGTGGGC
 CCCAGAGCATTGAAGGTGGAGCTCATGAAGACTTCAGCATTTGGTCTTTTGGCAACATCCCCAACA
 TCGTGGCAGAGTTGACTGGAGACAACATTCCTAAGGACTTTAGTGAGGATCAGGGGTACCCAGACCTCC
 AAATCCCTGTCTGTTGGAAAAACAGATGATGGATGTCTAGAAAACACCCCTGACACTGCAGAGTTCACT
 CGAGAGTTCCAGTTGCACCAGCATCTCTTTGATCCGGAACATGACTATCCAGGCTTGGGCAAGTGGAACA
 AGAACTCCTTTACGAGAAGATGAAGGGAGGAGAGACGAAAGCGGAGGAGTGTCAATCCATATCTACA
 AGGACAGAGACTGGATAATGTTGTTGCAAAGAAGTCTGTCCCCCATTTTTCAGATGAGGATAAGGATCCA
 GAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC226541 representing NM_001144757
 Red=Cloning site Green=Tags(s)

MVSRMVSTMLSGLLFWLASGWTPAFAYSPRTPDRVSEADIQRLLHGVMEQLGIARPRVEYPAHQAMNLVG
 PQSIEGGAHEGLQHLGPFGNIPNIVAELTGDNIPKDFSEDQGYDPPNCPVGTKDDGCLENTPDTAEFS
 REFQLHQHLFDPEHDYPGLGKWNKLLYEKMKGGERRRSVNPYLQGGRLDNVAKKSVPHFSDKDKDP
 E

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3350_g05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001144757

ORF Size: 633 bp

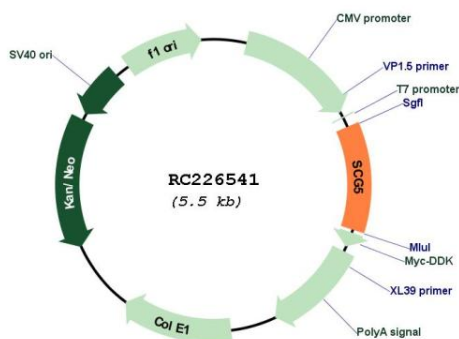
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

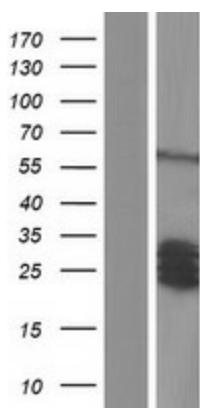
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001144757.2</u>
RefSeq ORF:	639 bp
Locus ID:	6447
UniProt ID:	<u>P05408</u>
Cytogenetics:	15q13.3
Protein Families:	Secreted Protein
MW:	23.5 kDa
Gene Summary:	<p>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]</p>

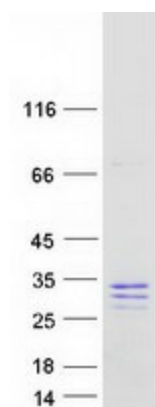
Product images:



Circular map for RC226541



Western blot validation of overexpression lysate (Cat# [LY428502]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226541 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SCG5 protein (Cat# [TP326541]). The protein was produced from HEK293T cells transfected with SCG5 cDNA clone (Cat# RC226541) using MegaTran 2.0 (Cat# [TT210002]).