

Product datasheet for **RC205382**

Chromogranin C (SCG2) (NM_003469) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Chromogranin C (SCG2) (NM_003469) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Chromogranin C
Synonyms:	CHGC; EM66; SgII; SN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC205382 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGAAGCAAAGACCCACTGGCTTGGAGCAGCCCTGTCTCTTATCCCTTTAATTTTCCTCATCTCTG
 GGGCTGAAGCAGCTTCATTTTCAGAGAAACCAGCTGCTTCAGAAAGAACCAGACCTCAGGTTGGAAAATGT
 CCAAAAAGTTTCCAGTCCGAAATGATCAGGGCTTTGGAGTACATAGAAAACCTCCGACAACAAGCTCAT
 AAGGAAGAAAGCAGCCAGATTATAATCCCTACCAAGGTGTCTGTCCCCCTCAGCAAAAAGAAAATG
 GCGATGAAAGCCACTTGCCCGAGAGGGATTCACTGAGTGAAGAAGACTGGATGAGAATAACTCGAAGC
 TTTGAGACAGGCTGAAAATGAGCCTCAGCTGCACAAAAGAAAATAAGCCCTATGCCTTGAAATTCAGAA
 AAGAACTTTCCAATGGACATGAGTGATGATTATGAGACACAGCAGTGGCCAGAAAGAAAGCTTAAGCACA
 TGCAATCCCTCCTATGTATGAAGAGAATCCAGGGATAACCCCTTTAAACGCACAAATGAAATAGTGGA
 GGAACAATATACTCCTCAAAGCCTTGCTACATTGGAATCTGTCTCCAAGAGCTGGGAAAACGACAGGA
 CCAACAACCCAGAAACGTGAGAGGATGGATGAGGAGCAAAAACCTTATACGGATGATGAAGATGATATCT
 ACAAGGCTAATAACATTGCCTATGAAGATGTGGTCTGGGGGAGAAGACTGGAAACCCAGTAGAGGAGAAAAT
 AGAGAGTCAAACCCAGGAAGAGGTGAGAGACAGCAAAGAGAATATAGAAAAAATGAACAATCAATGAT
 GAGATGAAACGCTCAGGGCAGCTTGGCATCCAGGAAGAAGGTCTTCGAAAGAGAGTAAAGACCAACTCT
 CAGATGATGTCTCAAAGTAATTGCCTATTTGAAAAGGTAGTAAATGCTGCAGGAAGTGGGAGGTTACA
 GAATGGGCAAAAATGGGAAAAGGGCCACCAGGCTTTTTGAGAAACCTCTTGATTCTCAGTCTATTTATCAG
 CTGATTGAAATCTCAAGGAATTTACAGATACCCCAAGAACTAATTGAGATGCTCAAACTGGGAGAG
 AGCCGAATGGATCAGTGGAAACCGGAGCGGGAGCTTGACCTTCTGTTGACCTAGATGACATCTCAGAGGC
 TGACTTAGACCATCCAGACCTGTTCCAAAATAGGATGCTCTCCAAGAGTGGCTACCCATAAACACCTGGT
 GGTGCTGGGACTGAGGCCTACCAGACGGGCTCAGTGTGAGGATATTTTAAATCTTTTAGGGATGGAGA
 GTGCAGCAAAATCAGAAAACGTCGTATTTTCCCAATCCATATAACCAGGAGAAAAGTTCTGCCAAGGCTCCC
 TTATGGTCTGGAAGATCTAGATCGAACGACTTCCCAAAGCTGCCTGGATTCCACATGTTGAAAACAGA
 CAGATGGCATATGAAAACCTGAACGACAAGGATCAAGAATTAGGTGAGTACTTGGCCAGGATGCTAGTTA
 AATACCCTGAGATCATTAAATCAAACCAAGTGAAGCGAGTTCTGGTCAAGGCTCATCTGAAGGTGACCT
 GCAGGAAGAGGAACAAATGAGCAGGCCATCAAAGAGCATTGAAATCAAGGCAGCTCTCAGGAGACTGAC
 AAGCTGGCCCCGGTGAGCAAAAGGTTCCCTGTGGGGCCCCGAAGAATGATGATACCCCAATAGGCAGT
 ACTGGGATGAAGATCTGTTAATGAAAGTCTGGAATACCTCAACCAAGAAAAGGCAGAAAAGGGAAGGGA
 GCATATTGCTAAGAGAGCAATGGAAAATATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205382 protein sequence
 Red=Cloning site Green=Tags(s)

MAEAKTHWLGAALSLIPLIFLISGAEAAAFQRNQLLQKEPDLRLENVQKFPSPEMIRALEYIENLRQQA
 KEESPDPYNPYQGVSVPLQQKENGDESHLPERDSLSEEDWMRIILEALRQAENEPQSAPKENKPYALNSE
 KNFPMDSDDYETQQWPERKLKHMQFPMPYEENSRDNPFKRTNEIVEEQYTPQSLATLESVFLGKLTG
 PNNQKRERMDDEEQLYTDDEDDIYKANNIAYEDVVGEDWNPVEEKIESQTQEEVRDSKENIEKNEQIND
 EMKRSGQLGIQEGLRKEKSKDQLSDDVSKVIAYLKRVLVNAAGSGRLQNGQNGERATRLFEKPLDSQSIYQ
 LIEISRNLQIPPEDLIEMLKTGKPNGSVEPERELDLPVDLDDISEADLDHPDLFQNRMLSKSGYPKTPG
 GAGTEALPDGLSVEDILNLLGME SAANQKTSYFPNPYNQEKVLPRLPYGAGRSRNLPKAAWIPHVENR
 QMAYENLNDKQELGEYLARMLVKYPEIINSNQKRVPGQGSSEGLQEEEEQIEQAIKEHLNQGSSQETD
 KLAPVSKRFPVGGPPKNDTPNRQYWDELLMKVLEYLNQEKAEKGREHIAKRAMENM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6833_e02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003469

ORF Size: 1851 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:

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: [NM_003469.5](#)

RefSeq Size: 2586 bp

RefSeq ORF: 1854 bp

Locus ID: 7857

UniProt ID: [P13521](#)

Cytogenetics: 2q36.1

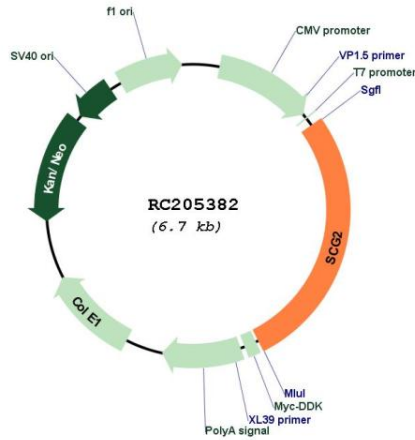
Domains: Granin

Protein Families: Secreted Protein, Transmembrane

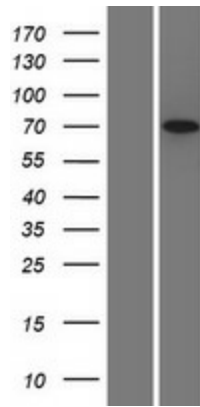
MW: 70.7 kDa

Gene Summary: The protein encoded by this gene is a member of the chromogranin/secretogranin family of neuroendocrine secretory proteins. Studies in rodents suggest that the full-length protein, secretogranin II, is involved in the packaging or sorting of peptide hormones and neuropeptides into secretory vesicles. The full-length protein is cleaved to produce the active peptide secretoneurin, which exerts chemotaxic effects on specific cell types, and EM66, whose function is unknown. [provided by RefSeq, Jul 2008]

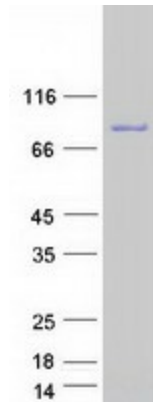
Product images:



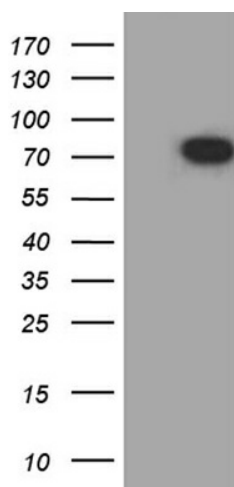
Circular map for RC205382



Western blot validation of overexpression lysate (Cat# [LY418654]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205382 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SCG2 protein (Cat# [TP305382]). The protein was produced from HEK293T cells transfected with SCG2 cDNA clone (Cat# RC205382) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SCG2 (Cat# RC205382, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SCG2 (Cat# [TA811870]). Positive lysates [LY418654] (100ug) and [LC418654] (20ug) can be purchased separately from OriGene.