

## Product datasheet for **RC210006**

### Semenogelin II (SEMG2) (NM\_003008) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Semenogelin II (SEMG2) (NM_003008) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Semenogelin II
Synonyms:	SGII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC210006 representing NM\_003008  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAAGTCCATCATCCTCTTTGCTTTCCCTGCTCCTTATCTTGAGAAGCAAGCAGCTGTGATGGGAC  
 AAAAAGGTGGATCAAAGGCCAATTGCCAAGCGGATCTTCCCAATTTCCACATGGAAAAAGGGCCAGCA  
 CTATTTTGGACAAAAAGCCAACAACATACTAAATCCAAAGCAGTTTTTCTATTCAACACACATATCAT  
 GTAGACATCAATGATCATGACTGGACCCGAAAAAGTCAGCAGTATGATTTGAATGCCCTACATAAGGCGA  
 CAAAATCAAACAACACCTAGGTGGAAGTCAACAAGTCTCAATTATAAACAAGAAGGCAGAGACCATGA  
 TAAATCAAAGGTCATTTTACATGATAGTTATACATCATAAAGGAGGCCAAGCTCATCATGGGACACAA  
 AATCCTTCTCAAGATCAGGGGAATAGCCCATCTGGAAAGGGATTATCCAGTCAATGTTCAAACACAGAAA  
 AAAGGCTATGGGTTTCATGGACTAAGTAAGAACAAGCTTCAGCCTCTGGTGCACAAAAAGGTAGAACACA  
 AGGTGGATCCCAAAGCAGTTATGTTCTCCAAACTGAAGAAGTCTAGTAAACAACAACAAGCTGAGACT  
 AAAAAATCTCATCAAATAAAGGCAATACCAAATGTGGTTGACGTGAGAGAGGAACATTCAAGTAAAC  
 TACAAACTTCACTCCATCCTGCACATCAAGACAGACTCCAACATGGACCCAAAGACATTTTTACTACCCA  
 AGATGAGCTCCTAGTATATAACAAGATCAACACCAGACAAAAATCTCAATCAAGATCAAGAGCATGGC  
 CGGAAGGCACATAAAATATCATACCCGCTTTCAGTACAGAAAGAAAGACAACCTTCCCATGGAGAAAAGA  
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 AAACCAGTAAACAATTCATAGTCAAGATCAAGAGCATGGCCATAAGGAAAATAAAATATCATACCAATCT  
 TCAAGTACAGAAAGACATCTCAACTGTGGAGAAAAGGCATCCAGAAAGGTGTATCCAAAGGCAGTA  
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 CAAAGCAGTATTTCTTTCAAATGAAAAGCTAGTAGAAGGCAAGTCTCAAATCCAGACACCAAATCCTA  
 ATCAAGATCAATGGTCTGGCCAAAATGCAAAGGAAAGTCTGGTCAATCTGCAGATAGCAAACAAGACCT  
 ACTCAGTCATGAACAAAAAGGCAGATACAAACAGGAATCCAGTGAAGTACATAATATTGTAATTACTGAG  
 CATGAGGTTGCCAAGATGATCATTGACACAACAATATAATGAAGACAGAAATCCAATATCTACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC210006 representing NM\_003008  
 Red=Cloning site Green=Tags(s)

MKSIILFVLSLLILEKQAAVMGQKGGSKGQLPSGSSQFPHGKKGQHYFGQKDQQHTKSKGSFSIQHTYH  
 VDINDHDWTRKSQQYDLNALHKATKSKQHLGGSQQLLNYKQEGRDHDKSKGFHMIIVHHKGGQAHHGTTQ  
 NPSQDQGNPSGKGLSSQCSNTEKRLWVHGLSKEQASASGAQKGRTOGGSSSYVLQTEELVYVKNQQRRET  
 KNSHQKNGHYQNVVDVREEHSSKLTSLHPAQDRLQHGPKDIFFTQDELLVYNKNQHQTKNLNQDQEHG  
 RKAHKISYSSRTEERQLHHGEKSVQKDVSKGSIISIQTEEKIHGKSNQVVIHSDQEHGHKKNKISYQS  
 SSTEERHLNCGEKGIQKGVSKGSIISIQTEEKIHGKSNQVRIPSQAQYGHKKNKISYQSSSTEERLNS  
 GEKDVQKGVSKGSIISIQTEEKIHGKSNQVTIIPSDQEHGHKKNKMSYQSSSTEERLNYGGKSTQKDV  
 QSSIISFQIEKLVEGKSQIQTPNPNDQWSGQNAKGGKSGQSDSKQDLLSHEQKGRYKQESSESHNIVITE  
 HEVAQDDHLLTQQYNEDRNPIST

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg3219\\_e05.zip](https://cdn.origene.com/chromatograms/mg3219_e05.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_003008

**ORF Size:** 1746 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\\_003008.3](#)

**RefSeq Size:** 1982 bp

**RefSeq ORF:** 1749 bp

**Locus ID:** 6407

**UniProt ID:** [Q02383](#)

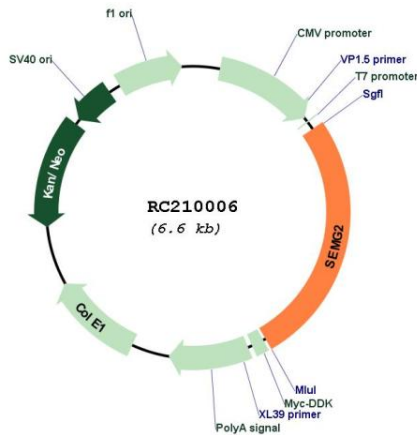
**Cytogenetics:** 20q13.12

**Protein Families:** Secreted Protein

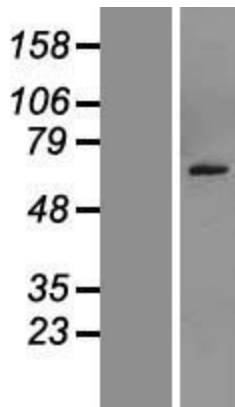
**MW:** 65.47 kDa

**Gene Summary:** The secreted protein encoded by this gene is involved in the formation of a gel matrix that encases ejaculated spermatozoa. Proteolysis by the prostate-specific antigen (PSA) breaks down the gel matrix and allows the spermatozoa to move more freely. The encoded protein is found in lesser abundance than a similar semenogelin protein. An antibacterial activity has been found for a antimicrobial peptide isolated from this protein. The genes encoding these two semenogelin proteins are found in a cluster on chromosome 20. [provided by RefSeq, Jan 2015]

**Product images:**



Circular map for RC210006



Western blot validation of overexpression lysate (Cat# [LY418963]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210006 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).