

Product datasheet for **RC216046**

Semenogelin I (SEMG1) (NM_003007) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semenogelin I (SEMG1) (NM_003007) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Semenogelin I
Synonyms:	CT103; dj172H20.2; SEMG; SGI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216046 representing NM_003007
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGCCCAACATCATCTTTGTACTTTCCCTGCTCCTCATCTTGGAGAAGCAAGCAGCTGTGATGGGAC
 AAAAAGGTGGATCAAAGGCCGATTACCAAGTGAATTTCCCAATTTCCACACGGACAAAAGGGCCAGCA
 CTATTCTGGACAAAAAGGCAAGCAAACTGAATCCAAAGCAGTTTTTCTATTCAATACACATATCAT
 GTAGATGCCAATGATCATGACCAGTCCCAGAAAAGTCAGCAATATGATTTGAATGCCCTACATAAGACGA
 CAAAATCACACGACATCTAGGTGGAAGTCAACAAGTCTCCATAATAACAAGAAGGCAGAGACCATGA
 TAAATCAAAGGTCATTTTACAGGGTAGTTATACACCATAAAGGAGGCAAAGCTCATCGTGGGACACAA
 AATCCTTCTCAAGATCAGGGGAATAGCCCATCTGGAAAGGGAATATCCAGTCAATATTCAAACACAGAAG
 AAAGGCTGTGGTTCATGGACTAAGTAAGAACAACCTCCGCTCTGGTGCACAAAAAGGTAGAAAACA
 AGCGGGATCCCAAAGCAGTTATGTTCTCAAAGTGAAGAGCTAGTAGCTAACAAACAACAACGTGAGACT
 AAAAAATCTCATCAAATAAAGGCCATTACCAAATGTGGTTGAAGTGAGAGAGGAACATTCAAGTAAAG
 TACAAACCTCACTCTGTCTGCGCACCAAGACAACCTCAAACATGGATCCAAAGACATTTTTTCTACCCA
 AGATGAGCTCCTAGTATATAACAAGATCAACACCAGACAAAAATCTCAATCAAGATCAACAGCATGGC
 CGAAAGGCAATAAAATATCATACCAATCTTCAAGTACAGAAGAAAGACGACTCCACTATGGAGAAAATG
 GTGTGCAGAAAGATGTATCCCAAAGCAGTATTTATAGCCAAACTGAAGAGAAAGCACAGGGCAAGTCTCA
 AAAACAGATAACAATCCAGTCAAGAGCAAGAGCATAGCCAAAAGGCAAATAAAATATCATACCAATCT
 TCAAGTACGGAAGAAAGACGACTCCACTATGGAGAAAATGGTGTGCAGAAAGATGTATCCCAACGCAGTA
 TTTATAGCCAAACTGAAAAGCTAGTAGCAGGCAAGTCTCAAATCCAGGCACCAAATCCTAAGCAAGAGCC
 ATGGCATGGTGAAAATGCAAAGGAGAGTCTGGCCAATCTACAAATAGAGAACAAGACCTACTCAGTCAT
 GAACAAAAGGCAGACACCAACATGGATCTCATGGGGATTGGATATTGTAATTATAGAGCAGGAAGATG
 ACAGTGATCGTCAATTTGGCACACATCTTAAACACGACCGAAACCCATTATTTACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216046 representing NM_003007
 Red=Cloning site Green=Tags(s)

MKPNIIFVLSLLLILEKQAAVMGQKGGSKGRLPSEFSQFPHGQKQHYSGQKKGKQQTESKGSFSIQYTYH
 VDANDHDQSRKSQQYDLNALHKTTKSQRHLGGSQQLLHNKQEGRDHDKSKGHFHRVVIHHKGGKAHRGTQ
 NPSQDQGNPSGKGISSQYSNTEERLWVHGLSKEQTSVSGAQKGRKQGGSSSYVLQTEELVANKQQRET
 KNSHQNKGHYQNVVEVREEHSSKVQTSLCPAHQDKLQHGSKDIFSTQDELLVYNKNQHQTKNLNQDQQHG
 RKANKISYQSSSTEERLHYGENGVQKDVSSQSIYSQTEEKAQKQSQKQITIPSEQEHSQKANKISYQS
 SSTEERLHYGENGVQKDVSSQSIYSQTEKL VAGKSQIQAPNPKQEPWHGENAKGESGQSTNREQDLLSH
 EQKGRHQHSHGGLDIVIEQEDDSDRHLAQHLNDRNPLFT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8061_e10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003007

ORF Size: 1386 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_003007.5](#)

RefSeq Size: 1649 bp

RefSeq ORF: 1389 bp

Locus ID: 6406

UniProt ID: [P04279](#)

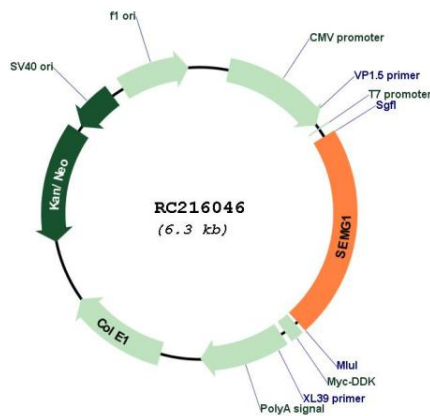
Cytogenetics: 20q13.12

Protein Families: Secreted Protein

MW: 52.13 kDa

Gene Summary: The protein encoded by this gene is the predominant protein in semen. The encoded secreted protein is involved in the formation of a gel matrix that encases ejaculated spermatozoa. This preproprotein is proteolytically processed by the prostate-specific antigen (PSA) protease to generate multiple peptide products that exhibit distinct functions. One of these peptides, Sgl-29, is an antimicrobial peptide with antibacterial activity. This proteolysis process also breaks down the gel matrix and allows the spermatozoa to move more freely. This gene and another similar semenogelin gene are present in a gene cluster on chromosome 20. [provided by RefSeq, Feb 2016]

Product images:



Circular map for RC216046