

Product datasheet for **RG203322**

Semenogelin I (SEMG1) (NM_198139) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Semenogelin I
Synonyms:	CT103; MGC14719; RATSVP1IA; semenogelin I; SEMG; seminal vesicle protein, secretion 2; seminal vesicle secretory protein 2; SGI; SVPIIA; Svs2; Svs2p2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG203322 representing NM_198139
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGCCCAACATCATCTTTGTACTTTCCCTGCTCCTCATCTTGGAGAAGCAAGCAGCTGTGATGGGAC
AAAAAGGTGGATCAAAAGGCCGATTACCAAGTGAATTTCCCAATTTCCACACGGACAAAAGGCCAGCA
CTATTCTGGACAAAAGGCAAGCAACAACTGAATCCAAGGCAGTTTTCTATTCAATACACATATCAT
GTAGATGCCAATGATCATGACCACTCCGAAAAAGTCAGCAATATGATTGAATGCCCTACATAAGACGA
CAAAATCACAACGACATCTAGGTGGAAGTCAACAACCTGCTCCATAATAACAAGAAGGCAGAGACCATGA
TAAATCAAAAGGTCATTTTCACAGGGTAGTTATACACCATAAAGGAGGCAAGCTCATCGTGGGACACAA
AATCCTTCTCAAGATCAGGGGAATAGCCCATCTGAAAAGGGAATATCCAGTCAATATTCAAACACAGAAG
AAAGGCTGTGGTTCATGGACTAAGTAAAGAACAACCTCCGCTCTGCTGGTGACAAAAGGTAGAAAACA
AGGCGGATCCCAAAGCAGTTATGTTCTCCAACTGAAGAGCTAGTAGCTAACAAACAACAACGTGAGACT
AAAAATTCTCATCAAAATAAAGGGCATTACCAAAATGTGGTTGAAGTGAGAGAGGAACATTCAAGTAAAG
TACAAACCTCACTCTGCTGCGCACCAAGACAAAACCTCAACATGGATCCAAAGACATTTTTTCTACCCA
AGATGAGCTCCTAGTATATAACAAGATCAACACCAGACAAAAATCTCAATCAAGATCAACAGCATGGC
CGAAAGGCAAAATAAATATCATACCAATCTTCAAGTACGGAAGAAAGACGACTCCACTATGGAGAAAATG
GTGTGCAGAAAGATGTATCCCAACGCAGTATTTATAGCCAACTGAAAAGCTAGTAGCAGGCAAGTCTCA
AATCCAGGCACCAATCTAAGCAAGAGCCATGGCATGGTGAACGCAAAAGGAGAGTCTGGCCAACTCT
ACAAATAGAGAACAAGACCTACTCAGTCATGAACAAAAGGCAGACCAACATGGATCTCATGGGGAT
TGGATATTGTAATTATAGAGCAGGAAGATGACAGTGATCGTCAATTTGGCACAACATCTTAACAACGACCA
AAACCCATTATTACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



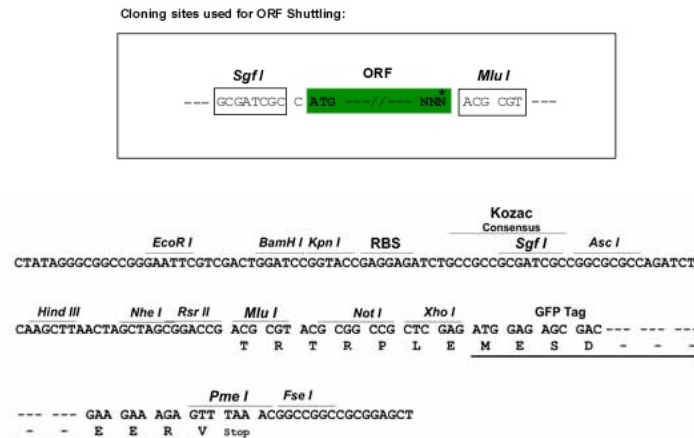
Protein Sequence: >RG203322 representing NM_198139
 Red=Cloning site Green=Tags(s)

MKPNIIFVL S L L L I L E K Q A A V M Q K G G S K G R L P S E F S Q F P H G Q K G Q H Y S G Q K G K Q Q T E S K G S F S I Q Y T Y H
 V D A N D H D Q S R K S Q Q Y D L N A L H K T T K S Q R H L G G S Q Q L L H N K Q E G R D H D K S K G H F H R V V I H H K G G K A H R G T Q
 N P S Q D Q G N S P S G K G I S S Q Y S N T E E R L W V H G L S K E Q T S V S G A Q K G R K Q G G S Q S S Y V L Q T E E L V A N K Q Q R E T
 K N S H Q N K G H Y Q N V V E V R E E H S S K V Q T S L C P A H Q D K L Q H G S K D I F S T Q D E L L V Y N K N Q H Q T K N L N Q D Q Q H G
 R K A N K I S Y Q S S S T E E R L H Y G E N G V Q K D V S Q R S I Y S Q T E K L V A G K S Q I Q A P N P K Q E P W H G E N A K G E S G Q S
 T N R E Q D L L S H E Q K G R H Q H G S H G G L D I V I I E Q E D D S D R H L A Q H L N N D Q N P L F T

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_198139

ORF Size: 1206 bp

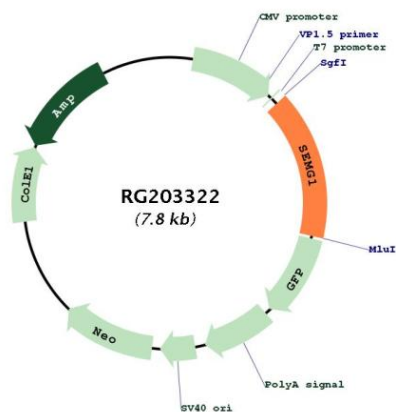
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_198139.1, NP_937782.1</u>
RefSeq Size:	1469 bp
RefSeq ORF:	1208 bp
Locus ID:	6406
Cytogenetics:	20q13.12
Protein Families:	Secreted Protein
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 RG203322