

Product datasheet for **RC210966**

Semaphorin 7a (SEMA7A) (NM_003612) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 7a (SEMA7A) (NM_003612) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SEMA7A
Synonyms:	CD108; CDw108; H-SEMA-K1; H-Sema-L; JMH; SEMAK1; SEMAL
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide
Sequence:

>RC210966 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGACGCCTCCTCCGCCGGACGTGCCGCCCCAGCGCACCGCGCCCGCTCCCTGGCCCGCGGCTC
GGTTGGGGCTTCCGCTGCGGCTGCGGCTGCTGCTGCTGCTGCTGCTGGGCGGCCCGCCCTCCGCCAGGGCCA
CCTAAGGAGCGGACCCCGCATCTTCGCCGTCTGGAAAGGCCATGTAGGGCAGGACCGGTGGACTTTGGC
CAGACTGAGCCGCACACGGTGCTTTCCACGAGCCAGGCAGTCTCTGTGTGGTGGGAGGACGTGGCA
AGGTCTACCTCTTTGACTTCCCCGAGGGCAAGAACGCATCTGTGCGCACGGTGAATATCGGCTCCACAAA
GGGTCTGTCTGGATAAGCGGGACTGCGAGAATACTACTCTCTGGAGAGGCGGAGTGAGGGGCTG
CTGGCCTGTGGCACCACGCCCGCACCCAGCTGCTGGAACCTGGTGAATGGCACTGTGGTGCCACTTG
GCGAGATGAGAGGCTACGCCCCCTCAGCCCGGACGAGAATACTCCCTGGTCTGTTTGAAGGGGACGAGGT
GTATCCACCATCCGGAAGCAGGAATAAATGGGAAGATCCCTCGTTCCGCCGATCCGGGGCAGAGT
GAGCTGTACACCAGTGATCTGTATGCAGAACCCACAGTTCATCAAAGCCACCATCGTGACCAAGACC
AGGCTTACGATGACAAGATCTACTACTTCTTCCGAGAGGACAATCCTGACAAGAATCCTGAGGCTCCTCT
CAATGTGTCCCCTGTGGCCAGTTGTGCAGGGGGACAGGGTGGGAAAAGTTCACTGTCACTCTCCAAG
TGGAACACTTTTCTGAAAGCCATGCTGGTATGCAGTGTGCTGCCACCAACAAGAACTTCAACAGGCTGC
AAGACGTCTTCTGCTCCCTGACCCAGCGGCCAGTGGAGGGACACCAGGGTCTATGGTGTCTTCTCAA
CCCCTGGAATACTCAGCCGTCTGTGTGATTCCTCGGTGACATTGACAAGGTCTTCCGTACCTCCTCA
CTCAAGGGCTACCACTCAAGCCTCCCAACCCGCGCCCTGGCAAGTGCCTCCAGACCAGCAGCCGATAC
CCACAGAGACCTCCAGGTGGCTGACCGTCACCCAGAGGTGGCGCAGAGGGTGGAGCCCATGGGGCCTCT
GAAGACGCCATTGTTCCACTCTAAATACCACTACCAGAAAAGTGGCCGTCCACCGCATGCAAGCCAGCCAC
GGGGAGACCTTTCATGTGCTTTACCTAACTACAGACAGGGGCACTATCCACAAGGTGGTGAACCGGGG
AGCAGGAGCACAGCTTCGCCTTCAACATCATGGAGATCCAGCCCTTCCGCCGCGCGGCTGCCATCCAGAC
CATGTCGCTGGATGCTGAGCGGAGGAAGCTGTATGTGAGCTCCAGTGGGAGGTGAGCCAGGTGCCCTG
GACCTGTGTGAGGTCTATGGCGGGGCTGCCACGGTGCCTCATGTCCCGAGACCCTACTGCGGCTGGG
ACCAAGGCCGCTGCATCTCCATCTACAGCTCCGAACGGTCACTGCTGCAATCCATTAATCCAGCCGAGCC
ACACAAGGAGTGTCCCAACCCCAACCAGACAAGGCCCACTGCAGAAGGTTTCCCTGGCCCCAACTCT
CGCTACTACCTGAGCTGCCCCATGGAATCCCGCCACGCCACTACTCATGGCGCCACAAGGAGAAGTGG
AGCAGAGCTGCGAACCTGGTACCAGAGCCCCAAGTGCATCCTGTTCATCGAGAACCTCACGGCGCAGCA
GTACGGCCACTACTTCTGCGAGGCCAGGAGGGCTCTACTTCCGCGAGGCTCAGCACTGGCAGCTGCTG
CCCAGGACGGCATCATGGCCGAGCACCTGCTGGGTATGCCTGTGCCCTGGCCGCTCCCTCTGGCTGG
GGGTGCTGCCCACTACTCTTGGCTTGTGTTCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC210966 protein sequence
 Red=Cloning site Green=Tags(s)

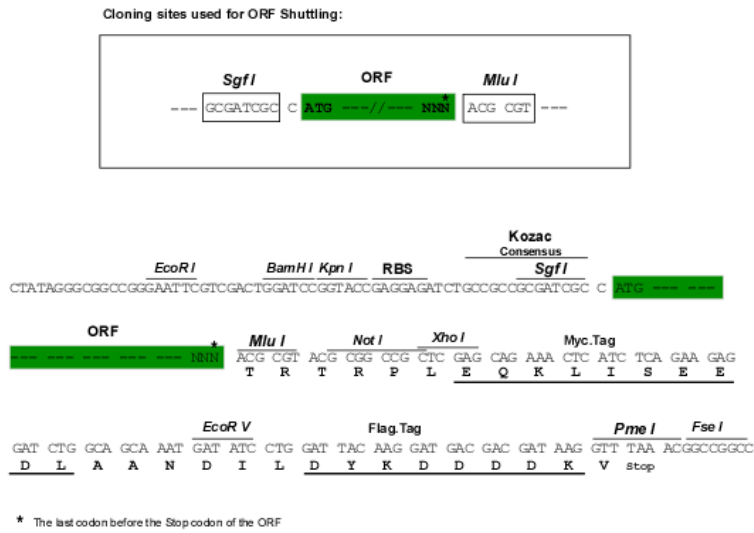
MTPPPPGRAAPSAPRARVPGPPARLGLPLRLRLLLLLWAAAAAQAQHLRSGPRIFAVWKGHVQDRVDFG
 QTEPHTVLFHEPGSSSVWVGGGRKVYVDFDFPEGKNASVRTVNIIGSTKGSCLDKRDCENYITLLERRSEGL
 LACGTNARHPSCWNLVNGTVVPLGEMRGYAPFSPDENSLVLFEGDEVYSTIRKQYNGKIPRFRIRIGES
 ELYTSDTVMQNPQFIKATIVHQDQAYDDKIYFFREDNPDKNPEAPLNVSRAVQLCRGDQGGESSLSVSK
 WNTFLKAMLVCSDAATNKNFNRLQDVFLLPDPSGQWRDTRVYGVFVSNPWNYSAVCVYSLGDIDKVFRTSS
 LKGYHSSLPNRPGKCLPDQQPIPTETTFQVADRHPEVAQRVEPMGPLKTPLFHSKYHYQKVAVHRMQASH
 GETFHVLYLTDRGTIHKVVEPGEQHSFAFNIMEIQPFRAAAIQTMSLDAERRKLYVSSQWEVSQVPL
 DLCEVYGGGCHGCLMSRDPYCGWDQGRCSISYSSERSVLQSNPAEPHKECPNPKPKAPLQKVSLAPNS
 RYYLSCPMSRHATYSWRHKENVEQSCEPHQSPNCILFIENLTAQQYGHYFCEAQEGSYFREAQHWQLL
 PEDGIMAEHLLGHACALASLWLVLP LTLGLLVH

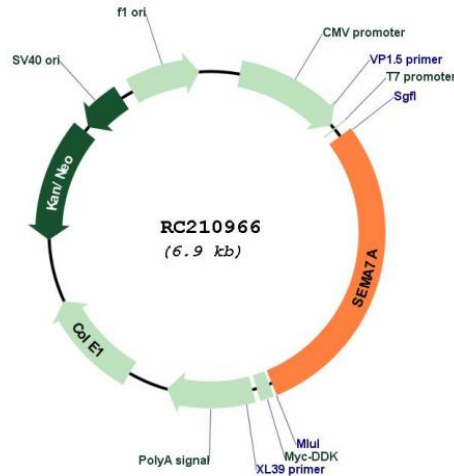
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6201_e05.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_003612

ORF Size: 1998 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.

RefSeq: [NM_003612.5](#)

RefSeq Size: 3393 bp

RefSeq ORF: 2001 bp

Locus ID: 8482

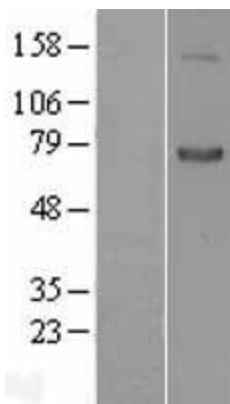
Domains: Sema, PSI

Protein Pathways: Axon guidance

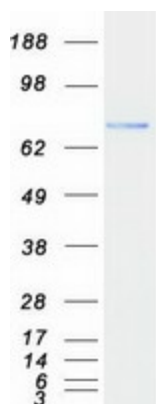
MW: 74.8 kDa

Gene Summary:

This gene encodes a member of the semaphorin family of proteins. The encoded preproprotein is proteolytically processed to generate the mature glycosylphosphatidylinositol (GPI)-anchored membrane glycoprotein. The encoded protein is found on activated lymphocytes and erythrocytes and may be involved in immunomodulatory and neuronal processes. The encoded protein carries the John Milton Hagen (JMh) blood group antigens. Mutations in this gene may be associated with reduced bone mineral density (BMD). Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Feb 2016]

Product images:

Western blot validation of overexpression lysate (Cat# [LY401196]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210966 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SEMA7A protein (Cat# [TP310966]). The protein was produced from HEK293T cells transfected with SEMA7A cDNA clone (Cat# RC210966) using MegaTran 2.0 (Cat# [TT210002]).