OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC205269

Semaphorin 3c (SEMA3C) (NM_006379) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 3c (SEMA3C) (NM_006379) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Semaphorin 3c
Synonyms:	SEMAE; SemE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205269 representing NM_006379
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCATTCCGGACAATTTGCGTGTTGGTTGGAGTATTTATTTGTTCTATCTGTGTGAAAGGATCTTCCC
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TTCCCACCATCCTTTAGACTACAGGATTTTATTAATGGATGAAGATCAGGACCGGATATATGTGGGAAGC
AAAGATCACATTCTTTCCCTGAATATTAACAATATAAGTCAAGAAGCTTTGAGTGTTTTCTGGCCAGCAT
CTACAATCAAAGTTGAAGAATGCAAAATGGCTGGCAAAGATCCCACACACGGCTGTGGGAACTTTGTCCG
TGTAATTCAGACTTTCAATCGCACACATTTGTATGTCTGTGGGAGTGGCGCTTTCAGTCCTGTCTGTACT
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GATCAACATAATTCCAAATGGCTAAGTGAACCTATGTTTGTAGATGCACATGTCATCCCAGATGGTACTG
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ACCACTTTCTTAAAGGCGAGGCTGGTGTGCTCGGTAACAGATGAAGACGGCCCAGAAACACACTTTGATG
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GCCCTGGAACTTGTCCAGGAGGAGCATTTACACCCAATATGCGAACCACCAAGGAGTTCCCAGATGATGT
TGTCACTTTTATTCGGAACCATCCTCTCATGTACAATTCCATCTACCCAATCCACAAAAGGCCTTTGATT
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ACCATGTCCTGTTTCTCGGAACAGATCGGGGTACTGTGCAAAAAGTGGTTGTTCTTCCTACTAACAACTC
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GACCTGGGCCAGCTCTGTGAGGGCTTTACCCTTCCACCCGAAGGACATCATGGGGGCATTCAGCCACTCA
GAAATGCAGATGATTAACCAATACTGCAAAGACACTCGGCAGCAACATCAGCAGGGAGATGAATCACAGA
AAATGAGAGGGGACTATGGCAAGTTAAAGGCCCTCATCAATAGTCGGAAAAGTAGAAACAGGAGGAATCA
GTTGCCAGAGTCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205269 representing NM_006379
Red=Cloning site Green=Tags(s)

MAFRTICVLVGVFICSICVKGSSQPQARVYLTFDELRETKTSEYFSLSHHPLDYRILLMDEDQDRIYVGS
KDHILSLNINNISQEALSVFWPASTIKVEECKMAGKDPTHGCGNFVRVIQTFNRTHLYVCGSGAFSPVCT
YLNRGRRSEDQVFMIDSKCESGKGRCSFNPNVNTVSVMINEELFSGMYIDFMGTDAAIFRSLTKRNAVRT
DQHNSKWLSEPMFVDAHVIPDGTDPNDAKVYFFFKEKLTDNNRSTKQIHSMIARICPNDTGGLRSLVNKW
TTFLKARLVCSVTDEDGPETHFDELEDVFLLETDNPRTTLVYGIFTTSSSVFKGSAVCVYHLSDIQTVFN
GPFAHKEGPNHQLISYQGRIPYPRPGTCPGGAFTPNMRTTKEFPDDVVTFIRNHPLMYNSIYPIHKRPLI
VRIGTDYKYTKIAVDRVNAADGRYHVLFLGTDRGTVQKVVVLPTNNSVSGELILEELEVFKNHAPITTMK
ISSKKQQLYVSSNEGVSQVSLHRCHIYGTACADCCLARDPYCAWDGHSCSRFYPTGKRRSRRQDVRHGNP
LTQCRGFNLKAYRNAAEIVQYGVKNNTTFLECAPKSPQASIKWLLQKDKDRRKEVKLNERIIATSQGLLI
RSVQGSDQGLYHCIATENSFKQTIAKINFKVLDSEMVAVVTDKWSPWTWASSVRALPFHPKDIMGAFSHS
EMQMINQYCKDTRQQHQQGDESQKMRGDYGKLKALINSRKSRNRRNQLPES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

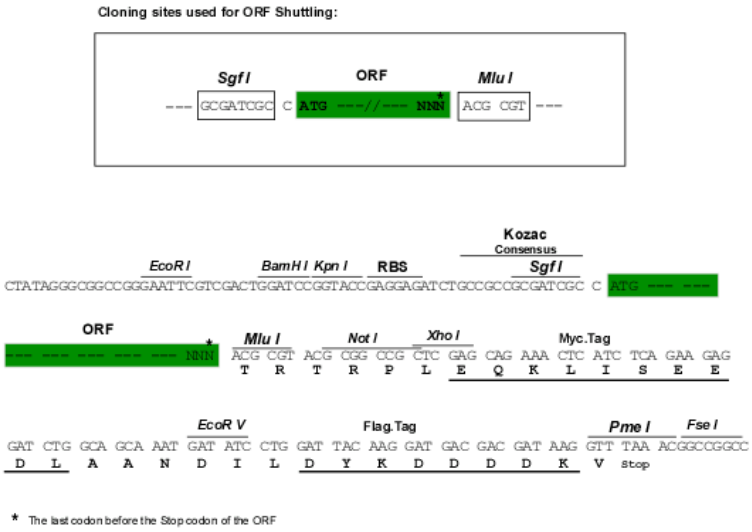
Chromatograms:

https://cdn.origene.com/chromatograms/mg2686_d02.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_006379

ORF Size:

2253 bp

OTI Disclaimer:

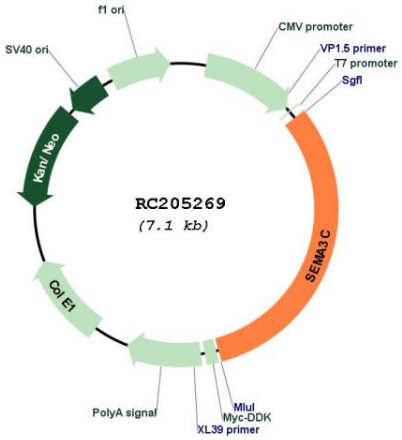
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation:

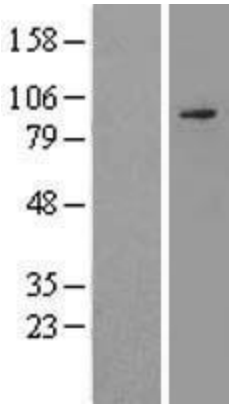
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	NM_006379.5
RefSeq Size:	5189 bp
RefSeq ORF:	2256 bp
Locus ID:	10512
UniProt ID:	Q99985
Cytogenetics:	7q21.11
Domains:	Sema, IG, PSI
Protein Families:	Secreted Protein
Protein Pathways:	Axon guidance
MW:	85 kDa
Gene Summary:	This gene encodes a secreted glycoprotein that belongs to the semaphorin class 3 family of neuronal guidance cues. The encoded protein contains an N-terminal sema domain, integrin and immunoglobulin-like domains, and a C-terminal basic domain. Homodimerization and proteolytic cleavage of the C-terminal propeptide are necessary for the function of the encoded protein. It binds a neuropilin co-receptor before forming a heterotrimeric complex with an associated plexin. An increase in the expression of this gene correlates with an increase in cancer cell invasion and adhesion. Naturally occurring mutations in this gene are associated with Hirschsprung disease. [provided by RefSeq, May 2017]

Product images:



Circular map for RC205269



Western blot validation of overexpression lysate (Cat# [LY401916]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205269 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).