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Product datasheet for RC211085

SEMA4B (NM_198925) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA4B (NM_198925) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SEMA4B
Synonyms:	SEMAC; SemC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC211085 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGCGCACCGCGATGGGCCTGAGGAGCTGGCTCGCCGCCCCATGGGGCGCGCTGCCGCCTCGGCCAC
CGCTGCTGCTGCTCCTGCTGCTGCTGCTCCTGCTGCAGCCGCCGCCTCCGACCTGGGCGCTCAGCCCCCG
GATCAGCCTGCCTCTGGGCTCTGAAGAGCGGCCATTCCTCAGATTCGAAGCTGAACACATCTCCAACTAC
ACAGCCCTTCTGCTGAGCAGGGATGGCAGGACCCTGTACGTGGGTGCTCGAGAGGCCCTCTTTGCACTCA
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CTCAGCGGCAGTCACCTGTTCACCTGTGGCACAGCAGCCTTCAGCCCCATGTGTACCTACATCAACATGG
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TGACAAGATCTACTTTTTCTTCAGCGAGACTGGCCAGGAATTTGAGTTCTTTGAGAACACCATTGTGTCC
CGCATTGCCCGCATCTGCAAGGGCGATGAGGGTGGAGAGCGGGTGCTACAGCAGCGCTGGACCTCCTTCC
TCAAGGCCCAGCTGCTGTGCTCACGGCCCGACGATGGCTTCCCCTTCAACGTGCTGCAGGATGTCTTCAC
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ACAAGGAGGTGAACCGTGAGACACAGCAGTGGTACACCGTGACCCACCCGGTGCCCACACCCCGGCCTGG
AGCGTGCATCACCAACAGTGCCCGGGAAAGGAAGATCAACTCATCCCTGCAGCTCCCAGACCGCGTGCTG
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CACACTCGGGCGTAGTCCAGGTGCCCATGGCCAACTGCAGCCTGTACCGGAGCTGTGGGGACTGCCTCCT
CGCCCGGGACCCCTACTGTGCTTGGAGCGGCTCCAGCTGCAAGCACGTCAGCCTCTACCAGCCTCAGCTG
GCCACCAGGCCGTGGATCCAGGACATCGAGGGAGCCAGCGCCAAGGACCTTTGCAGCGCGTCTTCGGTTG
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GCCTCGGCCTCCTGCCACGTGCTACCCACTGGGGACCTGCTGCTGGTGGGCACCCAACAGCTGGGGGAGT
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CCTGAAGCAGGGGGAATGTGCCAGCGTGCACCCCAAGACCTGCCCTGTGGTGCTGCCCCCTGAGACCCGC
CCACTCAACGGCCTAGGGCCCCCTAGCACCCCACTCGATCACCGAGGGTACCAGTCCCTGTCAGACAGCC
CCCCGGGGGCCCGAGTCTTCACTGAGTCAGAGAAGAGGCCACTCAGCATCCAAGACAGCTTCGTGGAGGT
ATCCCCAGTGTGCCCCCGGCCCCGGGTCCGCCTTGGCTCGGAGATCCGTGACTCTGTGGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211085 protein sequence
Red=Cloning site Green=Tags(s)

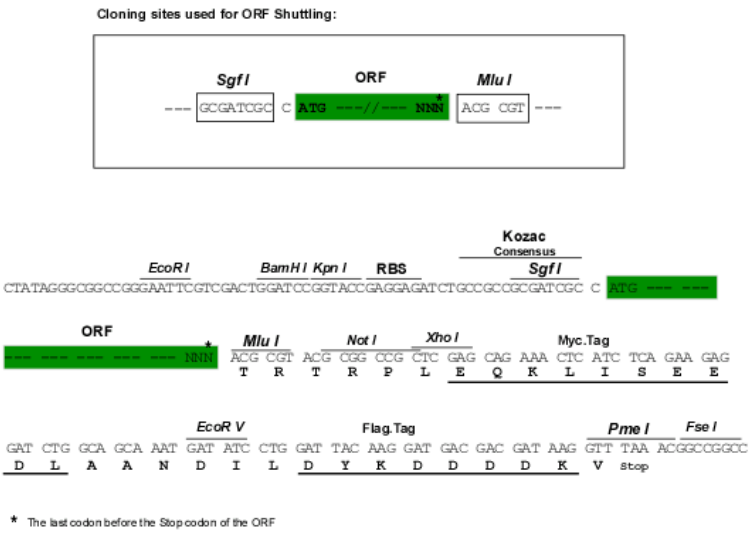
MLRTAMGLRSWLAAPWGALPPRPPLLLLLLLLLLQPPPPTWALSPRISLPLGSEERPFLRFEAEHISNY
TALLLSRDGRTLYVGAREALFALSSNLSFLPGGEYQELLWGADAEKKQQCSFKGKDPQRDCQNYIKILLP
LSGSHLFTCGTAAFSPMCTYINMENFTLARDEKGNVLLEDGKGRCPFDPNFKSTALVVDGELYTGTVSSF
QGNDPAISRSQSLRPTKTESSLNWLQDPAFVASAYIPESLGSLQGDDDKIYFFFSETGQEFEFFENTIVS
RIARICKGDEGGERVLQQRWTSFLKAQLLCSRPDDGFPFNVLQDVFTLSPSPQDWRDTLFYGVFTSQWHR
GTTEGSAVCVFTMKDVQRVFSGLYKEVNRETQQWYTVTHPVPTPRPGACITNSARERKINSSLQLPDRVL
NFLKDHFLMDGQVRSRMLLLQPQARYQRVAVHRVPGLHHTYDVLFLGTGDGRLHKAVSVGPRVHIIEELQ
IFSSGQPVQNLLLDTHRGLLYAASHSGVVQVPMANCSLYRSCGDCLLARDPYCAWSGSSCKHVSLYQPQL
ATRPWIQDIEGASAKDLCSASSVVSPSFVPTGEKPCEQVQFQPNTVNTLACPLLSNLATRLWLRNGAPVN
ASASCHVLPTGDLLLVGTQQLGEFQCWSLEEGFQQLVASYCPEVVEDGVADQTDEGGSVPVIISTSRVSA
PAGGKASWGADRSYWKEFLVMCTLFVLAVLLPVLFLLYRHRNSMKVFLKQGECASVHPKTCPVVLPPETR
PLNGLGPPSTPLDHRGYQSLSDSPPGARVFTESEKRPLSIQDSFVEVSPVCPRPRVRLGSEIRDSVV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6692_b07.zip

Restriction Sites: SgfI-MluI

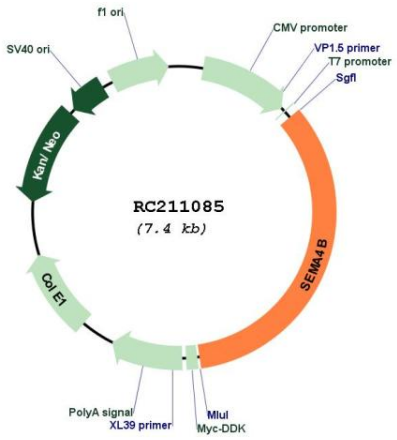
Cloning Scheme:



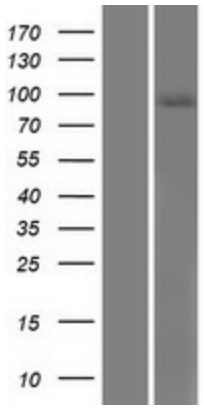
ACCN:	NM_198925
ORF Size:	2511 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_198925.3
RefSeq Size:	3780 bp
RefSeq ORF:	2514 bp
Locus ID:	10509
UniProt ID:	Q9NPR2
Cytogenetics:	15q26.1
Protein Families:	Transmembrane
Protein Pathways:	Axon guidance
MW:	92.7 kDa
Gene Summary:	Inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons.[UniProtKB/Swiss-Prot Function]

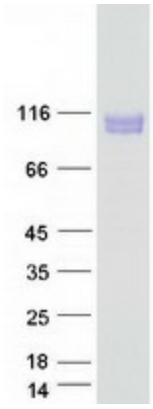
Product images:



Circular map for RC211085



Western blot validation of overexpression lysate (Cat# [LY412595]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC216548] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SEMA4B protein (Cat# [TP311085]). The protein was produced from HEK293T cells transfected with SEMA4B cDNA clone (Cat# RC211085) using MegaTran 2.0 (Cat# [TT210002]).