

Product datasheet for **MR217141**

Sema4b (NM_013659) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema4b (NM_013659) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema4b
Synonyms:	mKIAA1745; Semac; SemC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR217141 representing NM_013659
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCCGGGCGAGCCGCTCCGCTGTCTGCGGCGCGCTGCTGCTGCTGCTACTGCTGCTGCTGC
 GGACGACGACTACGCGGGCGCTCGGCCCCCGATCAGTGTGCCGCTGGGCTCTGAAGAAAGGCTGATTAG
 AAAATTTGAAGCTGAAAACATCTCCAACACACGCGCCCTTCTGCTGAGCCAGGATGGCAAGACGCTGTAT
 GTGGGGGCCCGAGAGGCCCTCTTTGCACTTAACAGCAACCTCAGCTTCTTGCCAGGCGGGGAGTACCAAG
 AGCTGCTGTGGAGTGCAGATGCTGACAGGAAGCAGCAGTGCAGCTTCAAGGGCAAGGACCCAAAGCGTGA
 CTGTCAAAACTACATCAAGATCCTCCTGCCACTCAACAGCAGCCACCTGCTCACCTGTGGCACGGCCGCC
 TTCAGCCCCCTGTGTCTTACATTACATAGCGAGCTTTACTTTAGCCCAAGATGAGGCCGGCAATGTCA
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 TGAGCTGTACACTGGAACAGTCACTAGCTTCCAGGGAAACGACCCAGCCATTTCCCGGAGCCAGAGTTCC
 CGCCCCACCAAGACTGAGAGCTCCCTCAACTGGCTACAAGACCCTGCCTTTGTGGCTCGGCCTAGTCC
 CCGAGAGCCTGGGCGAGCCCATAGGTGATGATGATAAGATCTACTTCTTCTCAGCGAGACGGGCCAGGA
 GTTTGAGTTCTTTGAGAACACCATCGTGTCCCGAGTTGCCGAGTCTGTAAGGGCGATGAGGGTGGAGAG
 CGGGTGTTCAGCAACGCTGGACCTCCTTTCTCAAGGCTCAGCTCCTGTGCTCCCGCCTGATGATGGCT
 TTCCCTTTAACGTGCTACAAGATGTCTTACCCTGAACCCCAACCTCAGGATTGGCGCAAGACCCTTTT
 CTATGGGTCTTTACCTCCAGTGGCACAGAGGGACCACAGAAGGCTCTGCCATCTGCGTCTTACCATG
 AATGATGTGAGAAGGCTTTGACGGCTGTACAAGAAAGTAAACAGAGAGACACAGCAGTGGTATACCC
 AGACCCACAGGTGCCACACCCGGCCGGGAGCGTGCATTACCAACAGTGCCTGGGCAAGCAAGATCAA
 CTGCTCCCTGCAGCTCCAGACCGAGTGTGAACCTTCTCAAGGATCACTTCTTGATGGATGGGCGAGGTC
 CGCAGTCGCTGTGCTGCTGCAGCCAGACCCGCTACCAGCGTGTGGCTGTGCACCGTGTGCCTGGCC
 TGCACAGCACTTATGATGCTCTATTTCTGGGCACTGGTGTGGCCGCTGCACAAAGCAGTGACCCTGAG
 CTCCAGAGTCCACATCATTGAGGAGTGCAGATCTTCCCTCAAGGACAGCCTGTGCAGAACCTGCTCTTG
 GACAGCCATGGGGACTGTTGTATGCCTCCTCCATTCCGGGGTGGTGAAGTGCCTGAGCAACTGCA
 GCCTGTACCAACCTGTGGAGACTGCCTCCTGGCTCGAGACCCCTACTGCGCCTGGACTGGCTCTGCCTG
 CAGGCTCGCTAGCCTCTACCAGCCTGATCTGGCCTCCAGGCCATGGACCCAGGACATTGAGGGTGCAGT
 GTCAAGGAACCTGCAAGAATTCCTCATACAAGGCCCGGTTTCTTGTGCCAGGTAAGCCATGTAACAAG
 TCCAGATCCAACCAACACAGTGAACACCTGGCCTGCCACTCCTCTCAAACCTGGCCACTCGGCTCTG
 GGTGCACAATGGAGCCCAAGTCAATGCCTCTGCCTCCTGCCGCGTGTACCCACCGGGGACCTGCTGCTG
 GTGGGCGAGCCAGCAGGGTTTGGGGGTGTTCCAGTGTGGTTCGATAGAAGAAGGATTCCAGCAGCTTGTGG
 CCAGCTACTGCCAGAGGTGATGGAGGAGGGGGTAAATGGACAAAAGAACCAGCGTGTGGTACCCCACT
 CATTATCAACACATCACGAGTGAAGTGCACCGGCTGGTGGCAGGGCCAGCTGGGGTGGGACAAGTCTAC
 TGGAAATGAATTCCTGGTGTGTACTCTGTTTGTGTTGCTATGGTGTCTTTGTTTCTGTTCTTTCTCT
 ACCGACATCGGGATGGCATGAACTCTTCTAAAGCAGGGCGAATGTGCCAGTGTGCACCCCAAGACTCG
 CCCTATAGTGCTACCACCTGAGACCCGACCGCTGAATGGTGTGCGCCCTCCTAGCACCCCAAGACTGACC
 CGAGGCTACCAGGCTCTGTCGGATAGCTCCCGAGGGCCAGAGTCTTCACTGAATCAGAGAAGAGGCCAC
 TGAGCATCCAGGACAGCTTTGTAGAGGTGTCTCCCGTGTGTCGGCCCGGAGTTCGACTGGGCTCTGA
 GATCCGAGACTCTGTGGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR217141 representing NM_013659
Red=Cloning site Green=Tags(s)

MGRASRSAVLRRALLLLLLLLLLLRTTTTRALGPRI SVPLGSEERLIRKFEAENISNYTALLLSQDGKTLY
VGAREALFALNSNLSFLPGGEYQELLWSADARKQCSFKGKDPKRDCQNYIKILLPLNSSHLLTCGTAA
FSPLCAYIHIA SFTLAQDEAGNVILEDGKGRCPFDPNFKSTALVVDGELYTGTVSSFQGNPAISRSQSS
RPTKTESSLNWLQDPAFVASAYVPESLGSPIGDDDKIYFFFSETGQEFEFFENTIVSRVARVCKGDEGGE
RVLQQRWTSFLKAQLLCSRPDGFPFNVLQDVFTLNPNPQDWRKTLFYGVFTSQWHRGTTEGSAICVFTM
NDVQKAFDGLYKKVNRETQQWYTETHQVPTPRPGACITNSARERKINSSLQLPDRVLNFKDHFLLMDGQV
RSRLLLQPRARYQRVAVHRVPLHSTYDVLFLGTGDGRLHKAVTLSSRVHIEELQIFPQGQPVQNL
DSHGGLLYASSHSGVVQVPVANC SLYPTCGDCLLARDPYCAWTGSACRLASLYQPDLASRPWTQDIEGAS
VKELCKNSSYKARFLVPGKPKQVQIQPNTVNTLACPLL SNLATRLWVHNGAPVNASASCRVLP TGDLLL
VGSQQGLGVFQCWSIEEGFQQLVASYCPEVMEEGVMDQKNQRDGPVIINTSRVSAPAGGRASWGADKSY
WNEFLVMCTLFV FAMVLLFLFFLYRHRDGMKFLKQGECA SVHPKTRPIVLPPE TRPLNGVGPSTPLDH
RGYQALSDSSPGPRVFT ESEKRPLSIQDSFVEVSPVCP RPRVRLGSEIRDSVV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_013659

ORF Size: 2469 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_013659.5](#)

RefSeq Size: 3946 bp

RefSeq ORF: 2472 bp

Locus ID: 20352

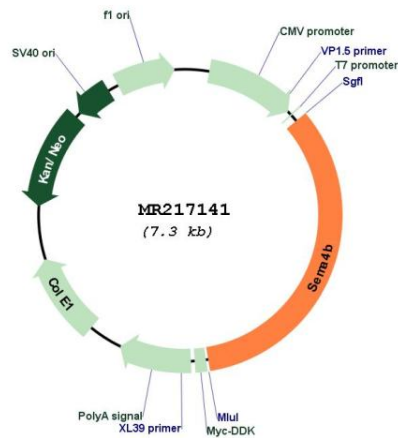
UniProt ID: [Q62179](#)

Cytogenetics: 7 D2

MW: 91.8 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 MR217141