

Product datasheet for **MR222703**

Sema3b (NM_009153) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema3b (NM_009153) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema3b
Synonyms:	LUCA; Se; sem; SemA; sema5; Sema; semaV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR222703 representing NM_009153
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGCGGGCTGAGGCCCGCCATGATCCCAGGCCCTGCCCCTCTCTGGGTAGCAGGGCTAGGGGATA
 CTGCCCTAACCTTCCCCGCTTCGGCTCTCCTTTCAAGAATTACAGGCCGGCATGGTGTCCGAACCTT
 CAGGCTGGAGCGGACCTGCTGTTATGAAGCCTTGTGGTGGATGAGGAGCGTGGACGCCTGTTTGTGGGT
 GCTGAGAACCACGTGGCTTCCCTCAGCCTGGACAACATCAGCAAGCGAGCCAAGAAGCTGGCCTGGCCCG
 CCCCCGTGGAATGGCGTGAAGAAATGCAACTGGGCAGGGAAGGACATTGGTACCGAGTGCATGAACTTCGT
 GAAGCTGCTGCACACCTACAACCACACCCACTTGTGGCCTGTGGCACAGGGGCTTTCCACCCAACCTGT
 GCCTTTGTGGAGTGGGCCACCGCTGGAGGAACCCATGCTTCACTGGACCGGAGGAACTTGAGGACG
 GCAAGGGGAAGACTCCTTATGACCCAAGGCATCGGGCTGCCTCGGTGCTGGTGGGGGAAGAAGTGTATTC
 TGGGGTGACAGCAGACCTTATGGGCCGGGACTTTACCATCTTTGAAGCCTTGGTGAAGTCCGAGTCTC
 CGAACAGAGCCCCATGATTCGCGTGGCTCAATGAACCCAAGTTGTCAAGGTCTTTGGATCCCAGAGA
 GTGAGAACCCTGATGACGATAAAATCTATTTCTTCCGCGAGTCCGCTGTGGAAGCAGCACCAGCAAT
 GGGGCGCATGTCTGTGTCTCGTGTGGCCAGATCTGCAGGAATGACCTGGGTGGCCAGCGGAGCTTGGTC
 AACAAATGGACCACATTTCTGAAGGCGCGGCTTGTGTGCTCAGTACCTGGAGTTGAGGGTACACCCACT
 TTGACCAACTTCAGGATGTTTTCTTCTGTCTCCCGAGACCGCCAGACACCTTCTCTATGCTGTCTT
 CTCCACCTCCAGTGGTGTCTTCCAGGGCTCTGCTGTGTGCGTGTACAGCATGAACGATGTGCGCCGATCC
 TTCTTGGGACCTTTTGTCAAAAGAGGGGCTACACACCAGTGGGTGTCTACCAGGGTGTGTCCCT
 ACCCAAGACTGGCATGTGCCCCAGCAAGACTTTGGCACCTTCAGCTCCACCAAGGACTTCCAGATGA
 CGTTATCCAGTTTGTCTCGGAACACCCTCTCATGTACAACCCAGTCTGCCCATGGGGGGCGCCCTCTC
 TTCTTACAAGTGGGAGCTGGGTACACCTTCAACCAATCGCCGAGACCGAGTAGCAGTCCCGATGGAC
 ACTACGATGTTCTCTTATTGGTACAGATGTGGGCACAGTGTGAAAGTATCTCAGTCCCCAAAGGCAG
 CCGACCTAATTCTGAAGGACTTCTCCTGGAAGAGCTGCAGGTGTTGAGGACTCTGCCGCTATCACCAGC
 ATGCAATCTCCTCTAAAAGGCAACAACCTACATAGCATCGCGCAGCGCAGTGGCCAGATTGCTTTGC
 ATCGCTGCACTGCCCTAGGCCGCGCTGCGCAGAATGCTGCTTGGCCCGTATCCTTACTGCGCCTGGGA
 TGGATCAGCTTGACACGCTTCCAGCCTACGGCCAAGAGACGGTCCGGAGGCAAGACATAAGGAATGGC
 GACCCAGCACCTATGCTCTGGAGACTTCTCACTCTGTGCTGCTGGAGAAGAAGGTGTTGGGTGTGG
 AGAGCGGCAGCGGTTTCTGGAGTGTGAGCCCCGCTCGCTCCAGGCGCATGTGCAGTGGACCTTCCAAGG
 TGACGGGGAGGCAGCTCACACCCAGGTGCTGGCTGAGGAGAGAGTAGAGCGCACTGCGCGGGGGTGTCTG
 TTGCGGGGGTGCGGCGCAGGACTCTGGCGTGTATCTTTGCGTGCGGTTGAACAAGGCTTTTCAAC
 CACTGCGTGCCTGGTGTGCATGTGTTGAGTGCGGCGCAGGCTGAACGACTGGCACGGGAGAGGAAGC
 AGCCGCTCCTGCACCTCTGGCCCTAAACTCTGGTACCGGACTTTCTGCAGTTGGTGGAGCCAGGCGGT
 GGCGGAGGTGCAAACTCCCTGCGAATGTGCCCGCCGACCCGGGACCACTCTGTGGCAGCAGATTAC
 GTCGTAAGGGTCGCAACAGACGGATGCATGTCTGAGCTCCGTGCTGAGCGTGGACCACGTAGTGCAGC
 TCACTGG

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222703 representing NM_009153
Red=Cloning site Green=Tags(s)

MGRAEAAAMIPGLALLWVAGLGDTAPNLPRRLRSFQELQARHGVRTFRLERTCCYEALLVDEERGRLFVG
AENHVASLSLDNISKRAKKLAWPAPVEWREECNWAGKDIGTECMNFVKLLHTYNHLLACGTGAFHPTC
AFVEVGHRLLEPMLQLDRRKLEDGKGTPTYDPRHRAASVLVGEELYSGVTADLMGRDFTIFRSLGQNP
RTEPHDSRWLNPEKFKVFWIPESENPDDDKIYFFRESAVEAAPAMGRMSVSRVGIQRNDLGGQRSLV
NKWTTFLKARLVCSVPGVEGDTHFDQLQDVFLSSRDRQTPLL YAVFSTSSGVFQGSAVCVYSMNDVRRS
FLGPF~~FAHKEGPTHQWVS~~YQGRVPYPRPGMCPSTKFTGTFSSTKDFPDDVIQFARNHPLMYNPVLP
MGRPL
FLQVQAGYTFTQIAADRVAADGHYDVLFIGTDVGTVLKVISVPKGSRPNSEGLLLEELQVFEDSAAITS
MQISSKRQQLYIASRSVAQIALHRCTALGRACAECLARDPYCAWDGSACTRFQPTAKRRFRRQDIRNG
DPSTLCSGSSSHSVLLEKVLGVESGSAFLICEPRSLQAHVQWTFQGAGEAAHTQVLAEEVERTARGLL
LRGLRRQDSGVYLCVAVEQGSQPLRRLVLHVL SAAQAERLARAEAAAPAPP~~PKLWYRDFLQL~~VEPGG
GGGANSRLMCRPQPGHHSVAADSRRKGRNRRMHVSELRAERGPRSAAHW

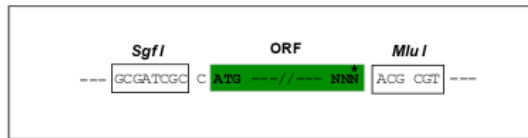
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9007_d10.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



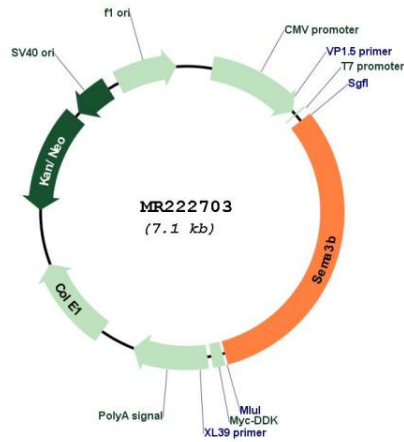
* The last codon before the Stop codon of the ORF

ACCN: NM_009153

ORF Size: 2247 bp

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	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:	<ol style="list-style-type: none"> 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_009153.2 , NM_009153.3 , NP_033179.2
RefSeq Size:	3115 bp
RefSeq ORF:	2250 bp
Locus ID:	20347
Cytogenetics:	9 58.31 cM
MW:	83.6 kDa
Gene Summary:	This gene encodes a secreted protein that belongs to the class 3 semaphorin/collapsin family. Members of this family play a role in growth cone guidance during neurogenesis. The encoded protein inhibits axonal extension. This protein is thought to be an osteoblast protein that regulates bone mass and affects skeletal homeostasis. A similar gene in humans functions as a tumor suppressor gene. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]

Product images:



Circular map for MR222703