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Product datasheet for MR231055

Sema3b (NM_001291537) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema3b (NM_001291537) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema3b
Synonyms:	LUCA; Se; sem; SemA; sema5; Semaa; semaV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR231055 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCGGGCTGAGGCCGCCGCCATGATCCCAGGCCTGGCCCTTCTCTGGGTAGCAGGGCTAGGGGATA
CTGCCCCTAACCTTCCCCGCCTTCGGCTCTCCTTTCAAGAATTACAGGCCCGGCATGGTGTCCGAACCTT
CAGGCTGGAGCGGACCTGCTGTTATGAAGCCTTGCTGGTGGATGAGGAGCGTGGACGCCTGTTTGTGGGT
GCTGAGAACCACGTGGCTTCCCTCAGCCTGGACAACATCAGCAAGCGAGCCAAGAAGCTGGCCTGGCCCG
CCCCCGTGGAATGGCGTGAAGAATGCAACTGGGCAGGGAAGGACATTGGTACCGAGTGCATGAACTTCGT
GAAGCTGCTGCACACCTACAACCACACCCACTTGCTGGCCTGTGGCACAGGGGCTTTCCACCCAACCTGT
GCCTTTGTGGAGGTGGGCCACCGGCTGGAGGAACCCATGCTTCAACTGGACCGGAGGAAACTTGAGGACG
GCAAGGGGAAGACTCCTTATGACCCAAGGCATCGGGCTGCCTCGGTGCTGGTGGGGGAAGAACTGTATTC
TGGGGTGACAGCAGACCTTATGGGCCGGGACTTTACCATCTTTCGAAGCCTTGGTCAGAATCCGAGTCTC
CGAACAGAGCCCCATGATTCCCGCTGGCTCAATGAACCCAAGTTTGTCAAGGTCTTTTGGATCCCAGAGA
GTGAGAACCCTGATGACGATAAAATCTATTTCTTCTTCCGCGAGTCCGCTGTGGAAGCAGCACCAGCAAT
GGGGCGCATGTCTGTGTCTCGTGTTGGCCAGATCTGCAGGAATGACCTGGGTGGCCAGCGGAGCTTGGTC
AACAAATGGACCACATTTCTGAAGGCGCGGCTTGTGTGCTCAGTACCTGGAGTTGAGGGTGACACCCACT
TTGACCAACTTCAGGATGTTTTCCTTCTGTCCTCCCGAGACCGCCAGACACCTCTTCTCTATGCTGTCTT
CTCCACCTCCAGTGGTGTCTTCCAGGGCTCTGCTGTGTGCGTGTACAGCATGAACGATGTGCGCCGAGCC
TTCTTGGGACCTTTTGCTCACAAAGAGGGGCCTACACACCAGTGGGTGTCCTACCAGGGTCGTGTCCCCT
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CGTTATCCAGTTTGCTCGGAACCACCCTCTCATGTACAACCCAGTCCTGCCCATGGGGGGGCGCCCTCTC
TTCCTACAAGTGGGAGCTGGGTACACCTTCACCCAAATCGCCGCAGACCGAGTAGCAGCTGCCGATGGAC
ACTACGATGTTCTCTTCATTGGTACAGATGTGGGCACAGTGCTGAAAGTGATCTCAGTCCCCAAAGGCAG
CCGACCTAATTCTGAAGGACTTCTCCTGGAAGAGCTGCAGGTGTTCGAGGACTCTGCCGCTATCACCAGC
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TGGATCAGCTTGCACACGCTTCCAGCCTACGGCCAAGAGACGGTTCCGGAGGCAAGACATAAGGAATGGC
GACCCCAGCACCCTATGCTCTGGAGACTCTTCTCACTCTGTGCTGCTGGAGAAGAAGGTGTTGGGTGTGG
AGAGCGGCAGCGCGTTTCTGGAGTGTGAGCCCCGCTCGCTCCAGGCGCATGTGCAGTGGACCTTCCAAGG
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CACTGCGTCGCCTGGTGCTGCATGTGTTGAGTGCGGCGCAGGCTGAACGACTGGCACGGGCAGAGGAAGC
AGCCGCTCCTGCACCTCCTGGCCCTAAACTCTGGTACCGGGACTTTCTGCAGTTGGTGGAGCCAGGCGGT
GGCGGAGGTGCAAACTCCCTGCGAATGTGCCGCCCGCAGCCCGGGCACCACTCTGTGGCAGCAGATTCAC
GTCGTAAGGGTCGCAACAGACGGATGCATGTCTCTGAGCTCCGTGCTGAGCGTGGACCACGTAGTGCAGC
TCACTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

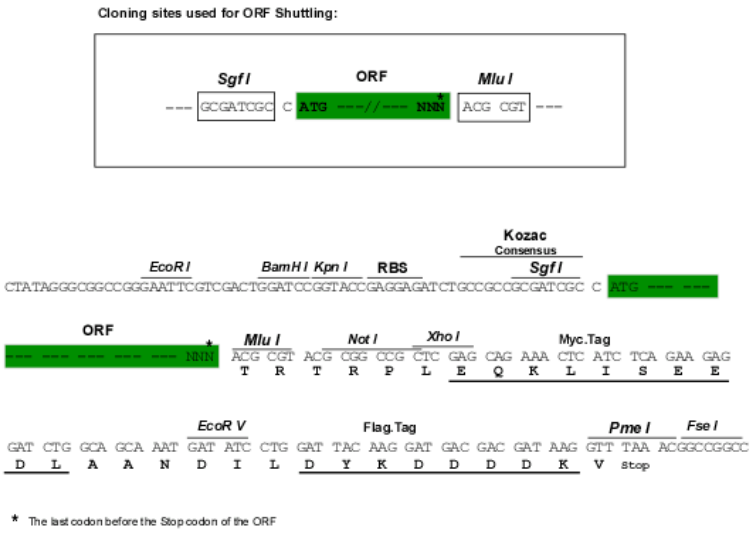
>MR231055 protein sequence
Red=Cloning site Green=Tags(s)

MGRAEAAAMIPGLALLWVAGLGDTAPNLPRLRLSFQELQARHGVRTFRLERTCCYEALLVDEERGRLFVG
AENHVASLSLDNISKRAKKLAWPAPVEWREECNWAGKDIGTECMNFVKLLHTYNHTHLLACGTGAFHPTC
AFVEVGHRLEEPMLQLDRRKLEDGKGKTPYDPRHRAASVLVGEELYSGVTADLMGRDFTIFRSLGQNPSL
RTEPHDSRWLNEPKFVKVFWIPESENPDDDKIYFFFRESAVEAAPAMGRMSVSRVGQICRNDLGGQRSLV
NKWTTFLKARLVCSVPGVEGDTHFDQLQDVFLLSSRDRQTPLLYAVFSTSSGVFQGSAVCVYSMNDVRRA
FLGPFAHKEGPTHQWVSYQGRVPYPRPGMCPSKTFGTFSSTKDFPDDVIQFARNHPLMYNPVLPMGGRPL
FLQVGAGYTFTQIAADRVAAADGHYDVLFIGTDVGTVLKVISVPKGSRPNSEGLLLEELQVFEDSAAITS
MQISSKRQQLYIASRSAVAQIALHRCTALGRACAECCLARDPYCAWDGSACTRFQPTAKRRFRRQDIRNG
DPSTLCSGDSSHSVLLEKKVLGVESGSAFLECEPRSLQAHVQWTFQGAGEAAHTQVLAEERVERTARGLL
LRGLRRQDSGVYLCVAVEQGFSQPLRRLVLHVLSAAQAERLARAEEAAAPAPPGPKLWYRDFLQLVEPGG
GGGANSLRMCRPQPGHHSVAADSRRKGRNRRMHVSELRAERGPRSAAHW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001291537

ORF Size: 2247 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_001291537.1, NP_001278466.1

RefSeq Size: 4010 bp

RefSeq ORF: 2250 bp

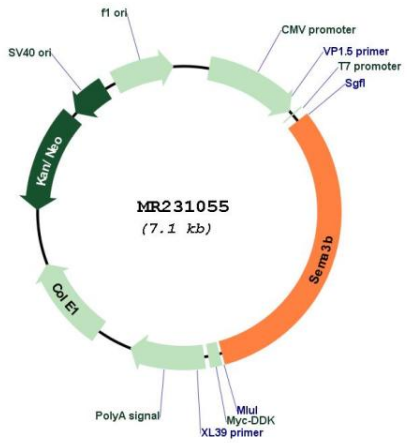
Locus ID: 20347

Cytogenetics: 9 58.31 cM

MW: 83.1 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 MR231055