

## Product datasheet for **MC228844**

### Sema3b (NM\_001291537) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sema3b (NM_001291537) Mouse Untagged Clone
Tag:	Tag Free
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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**Fully Sequenced ORF:** >MC228844 representing NM\_001291537  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGGGCGGGCTGAGGCCGCCCATGATCCCAGGCCCTGCCCCTTCTCTGGGTAGCAGGGCTAGGGGATA  
 CTGCCCTAACCTTCCCCGCTTCGGCTCTCCTTTCAAGAATTACAGGCCGGCATGGTGTCCGAACCTT  
 CAGGCTGGAGCGGACCTGCTGTTATGAAGCCTTGTGGTGGATGAGGAGCGTGGACGCCTGTTTGTGGGT  
 GCTGAGAACCACGTGGCTTCCCTCAGCCTGGACAACATCAGCAAGCGAGCCAAGAAGCTGGCCTGGCCCG  
 CCCCCGTGGAATGGCGTGAAGAAATGCAACTGGGCAGGGAAGGACATTGGTACCGAGTGCATGAACTTCGT  
 GAAGCTGCTGCACACCTACAACCACACCCACTTGTGGCCTGTGGCACAGGGGCTTCCACCCAACCTGT  
 GCCTTTGTGGAGTGGGCCACCGCTGGAGGAACCCATGCTTCACTGGACCGGAGGAACTTGAGGACG  
 GCAAGGGGAAGACTCCTTATGACCAAGGCATCGGGCTGCCTCGGTGCTGGTGGGGGAAGAAGTGTATTC  
 TGGGGTGACAGCAGACCTTATGGGCCGGGACTTTACCATCTTTCGAAGCCTTGGTCAAGATCCGAGTCTC  
 CGAACAGAGCCCCATGATTCGCCGTGGCTCAATGAACCCAAGTTGTCAAGGTCTTTTGGATCCCAGAGA  
 GTGAGAACCCTGATGACGATAAAATCTATTTCTTCCGCGAGTCCGCTGTGGAAGCAGCACCAGCAAT  
 GGGGCGCATGTCTGTGTCTCGTGTGGCCAGATCTGCAGGAATGACCTGGGTGGCCAGCGGAGCTTGGTC  
 AACAAATGGACCACATTTCTGAAGGCGCGGCTTGTGTGCTCAGTACCTGGAGTTGAGGGTACACCCACT  
 TTGACCAACTTCAGGATGTTTTCTTCTGTCTCCCGAGACCGCCAGACACCTCTTCTATGCTGTCTT  
 CTCCACCTCCAGTGGTGTCTTCCAGGGCTCTGCTGTGTGCGTGTACAGCATGAACGATGTGCGCCGAGCC  
 TTCTTGGGACCTTTTGTCAAAAGAGGGGCTACACACCAGTGGGTGTCTACCAGGGTGTGTCCCT  
 ACCAAGACCTGGCATGTGCCCCAGCAAGACCTTGGCACCTTCAGCTCCACCAAGGACTTCCAGATGA  
 CGTTATCCAGTTTGTCTCGGAACCACCTCTCATGTACAACCCAGTCTGCCCATGGGGGGCGCCCTCTC  
 TTCTTACAAGTGGGAGCTGGGTACACCTTACCCTAAATCGCCGAGACCGAGTAGCAGCTGCCGATGGAC  
 ACTACGATGTTCTTTCATTGGTACAGATGTGGGCACAGTGTGAAAGTATCTCAGTCCCCAAAGGCAG  
 CCGACCTAATTCTGAAGGACTTCTCCTGGAAGAGCTGCAGGTGTTGAGGACTCTGCCGCTATCACCAGC  
 ATGCAAATCTCCTCTAAAAGGCAACAACCTACATAGCATCGCGCAGCGCAGTGGCCAGATTGCTTTGC  
 ATCGCTGCACTGCCCTAGGCCGCGCTGCGCAGAATGCTGCTTGGCCCGTATCCTTACTGCGCCTGGGA  
 TGGATCAGCTTGCACACGCTTCCAGCCTACGGCCAAGAGACGGTTCGGGAGGCAAGACATAAGGAATGGC  
 GACCCAGCACCTATGCTCTGGAGACTTCTCACTCTGTGCTGCTGGAGAAGAAGGTGTTGGGTGTGG  
 AGAGCGGCAGCGGTTTCTGGAGTGTGAGCCCCGCTCGCTCCAGGCGCATGTGCAGTGGACCTTCCAAGG  
 TGACGGGGAGGCAGCTCACACCCAGGTGCTGGCTGAGGAGAGAGTAGAGCGCACTGCGCGGGGGCTGCTG  
 TTGCGGGGGCTGCGGCGCAGGACTCTGGCGTGTATCTTTGCGTGCAGGTTGAACAAGGCTTTTCAAC  
 CACTGCGTGCCTGGTGTGCATGTGTTGAGTGCAGGCGCAGGCTGAACGACTGGCACGGGAGAGGAAGC  
 AGCCGCTCCTGCACCTCCTGGCCCTAACTCTGGTACCGGGACTTCTGCAGTTGGTGGAGCCAGGCGGT  
 GGCGGAGGTGCAAACCTCCTGCGAATGTGCCCGCCGACCCGGGACCACTCTGTGGCAGCAGATTAC  
 GTCGTAAGGGTCGCAACAGACGGATGCATGTCTGAGCTCCGTGCTGAGCGTGGACCACGTAGTGCAGC  
 TCACTGGTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001291537  
**Insert Size:** 2250 bp

<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u><a href="#">NM_001291537.1</a></u> , <u><a href="#">NP_001278466.1</a></u>
<b>RefSeq Size:</b>	4010 bp
<b>RefSeq ORF:</b>	2250 bp
<b>Locus ID:</b>	20347
<b>Cytogenetics:</b>	9 58.31 cM
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (3) represents the longest transcript. Variants 1 through 5 encode the same protein.</p>