

Product datasheet for **MR221960**

Sema6b (NM_001130456) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema6b (NM_001130456) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema6b
Synonyms:	Sema; Seman; semaZ; Vlb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR221960 representing NM_001130456
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGGACCCCGGAGTGCCCCCTCACGCCCGGCCCTGTGTTTTCTGCTGTTGCTCCTGGGGTCA
 CCTATGGCCTTTTCCAGAAGAACCACCTCCACTCAGCGTGGCTCCAGGGACTACTTGAGCCACTATCC
 CGTGTTCTGTTGGGAGCGGGCTGGTCTGACCGCTGCGGAGGGTGTGAGGACCTCAACATCCAGAGA
 GTGCTACGTGTTAACAGGACACTGTTTCATTGGGGACAGAGATAACCTGTACCAAGTAGAACTGGAGCCAT
 CCACCTCCACGGAGCTGCGATATCAGAGGAAGCTGACCTGGCGCTCAACCCAGTGACATCGATGTGTG
 TCGAATGAAGGGCAAGCAAGAGGGTGTGAGTGTGCGAACTTGTCAAGGTGCTCCTGCTTCGCGATGAGTCC
 ACGCTGTTCTGTTGCGGCTCCAATGCGTTCAATCCCATCTGCGCAATTACAGTATGGACACACTGCAGC
 TTCTTGGTGACAGCATCAGCGGTATGGCCCGCTGCCCTATGACCCAAACATGCCAATGTCGCCCTCTT
 CTCAGATGGGATGCTCTTACAGCCACGGTACTGACTTCTAGCCATCGACGCTTTATCTACCGCAGC
 CTTGGGGACCGCCACACTGCGCACAGTAAAGCACGACTCCAAGTGGTTTAAAGAGCCGTAATTTGTGC
 ATGCAAGTGGAGTGGGGAAGCCACGTCTATTTCTTCTCCGGGAGATCGCCATGGAGTTTAACTACCTGGA
 AAAGGTGGTGGTGTCTCGAGTGGCCGTGTGTGCAAGAATGACGTGGGCGGCTCGCCACGAGTGTGGAG
 AAGCAGTGGACTTCTTCTGAAGGCCCGGCTCAACTGCTCAGTGCCAGGGGATTCACACTTCTACTTCA
 ACGTCTCGAGGCTGTGACGGGCGTGGTGTGAGCCTGGTGGTGTGTCGGGTGATCCTCGCTGTCTTCTAAC
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 GGCCGCTCCGGGAACAGAAGTGCCTGAGTGTGATCTGGACACCAGTGCCTGAAGACCAAGTGCACCGCC
 CCAGGCCCTGGGTGCTGCGCGCACCTGGCATGACAGTACAACCGCTCCAGTGCCCTCCCTGACGAGATCCT
 CAACTTTGTAAAGACCCACCCACTGATGGATGAGGCAGTACCTTCCCTGGGTCACTCGCCGTGGATTGTG
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 AGGGACCACAGGGCCAGCATCTTTTGGAGGAGTTTGTGACCTACCGCCAGACAGGTGTGGACGACCC
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 CAGCCTTCCCCGCTGTGTGGTTCGTGTTCTGTTGCCGTTGCCAGCTGTACTCGGGTGCATGAAGAA
 CTGTATTGGCAGCCAGGATCCATACTGCGGGTGGGCCCTGATGGCTCCTGCATCTTCTCAGACCAGGA
 ACTAGTCCACGTTTGTGCAAGATGTGTCCGGGGCCAGCACCTTGGCTTAGGTGACTGCACTGGACTCT
 TGCAGCCAGCCTCTCAGATGACCGCGCAGGGCTGGTGTGCGTGAACCTGCTAGTGACGCTCCTCGGTGGC
 AGCGTTCTGTTGGTGGGTGCCGTGGTGTCCGGCTTCAAGTGTAGGCTGGTTCGTGGGTCTCCGCGAGCGCGG
 GAGCTGGCCCGCGCAAGGACAAGGAGGCCATTCTGGCGCACGGCGGAGCGAGGAGGATCTGAGCGTGA
 GCCGACTAGGCGAGCGCAGGGGGACCGGGCCCGGGGTGCTGGAGGAGCCGGCGGGTCCCGGAGGTCC
 CCCGGAGGCCCTGCTGGCCCCGTTATGCAGAATGGCTGGACAAAGGCAGCGCTGCTGCATGGTGGCCCT
 CACGACCTGGACACGGGGCTGCTGCCACCCAGAGCAGACGCTTACCCAGAAACGCTGCCACGC
 CACACCCACACGCCACGCCCTGGGTCTCGAGCCTGGGACCACAGCCACGCGCTGCTGTGCGCCTCAGC
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 CCGGAATCTCGCTCTGCGCCCCAGATCCTGCGGGCCTCTACCCAGGCGACTTCCCGCTCACGCCCC
 ACGCCAGCCCGG[AT]CCGCCGGCGGGTGGTGTCCGCACCCACGGGCCCTTGGACCCCTCGGTGGGCGA
 CGGCTGCCCGGGCCATGGAGCCACCTGCAACCAGCAGCCTGCGGAGGCGGGTCCACCGGGCCCCC
 ACAGCCGCCCTACGGCGCACACACATTCAACAGCGCGAGGCTCGGCCGGGGTTCATCGTCTCGCC
 GCCACCCACCGCGGACTCTACACACTTGTGCCCTGCGGACGGGCGAGCGGACTGCACCCCGGTACC
 C

ACGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGA
TTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR221960 representing NM_001130456
 Red=Cloning site Green=Tags(s)

MWTPRVPPRPALSFFLLLLLVGTYGLFPEEPPPLSVAPRDYLSHYVPVFGSGPGRLLTAAEGAEDLNIQR
 VLRVNRFLFIGDRDNLQVELEPSTSTELRYQRKLTWRSNPSIDVCRMKGKQEGECRNFKVLLLLRDES
 TLFVCGSNAFNPICANYSMDTLQLLGDSISGMARCPYDPKHANVALFSDGMLFTATVTDFLAIDAVIYRS
 LGDRPTLRTVKHDSKWFKEPYFVHAVEWGS HVYFFREIAMEFNYLEKVVVSRVARVCKNDVGGSPRVLE
 KQWTSFLKARLNCSVPGDSHFYFNVLQAVTGVVSLGGRPVILAVFSTPSNSIPGSAVCAFDMNQVAAVFE
 GRFREQKSPESIWTPVPEDQVPRPRPGCCAAPGMQYNASSALPDEILNFVKTHPLMDEAVPSLGHSPWIV
 RTLMRHLTRVAVDVGAGPWGNQITIVFLGSEAGTVLKFLVKNASVSGTTGPSIFLEEFETYRPDRCGRP
 SSAGEWGQRLLSLELDAASGGLA AFPRCVVRVPVARCQLYSGCMKNCIGSQDPYCGWAPDGSCIFLRPG
 TSATFEQDVSGASTSGLGDCTGLLRASLSDDRAGLVSNLLVTSSVAAFVVGAVVSGF SVGWVGLRERR
 ELARRKDEAILAHGGSEAVLSVRLGERRGTGPGRRGGAGGGPGPPEALLAPLMQNGWTKAALLHGGP
 HDLDTGLLPTPEQTPLPQKRLPTPHPHALGSRAWDHSHALLSASASTLLLLAPARASEQPQVPAEPP
 PESRLCAPRSCRASHPGDFLTPHASPXRRRVVSAPTGPLDPSVGDGLPGWSPPATSSLRPRPGPHGPP
 TAALRRHTFNSGEARPGHRPRRHPADSTHLLPCGTGERTAPPVP

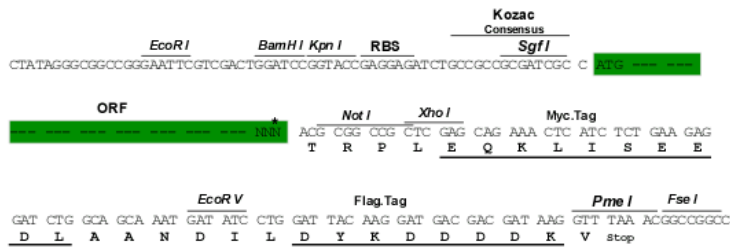
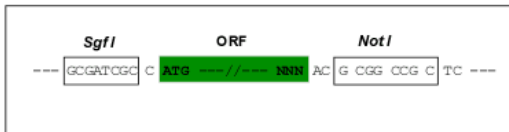
TRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9012_f03.zip

Restriction Sites: SgfI-NotI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

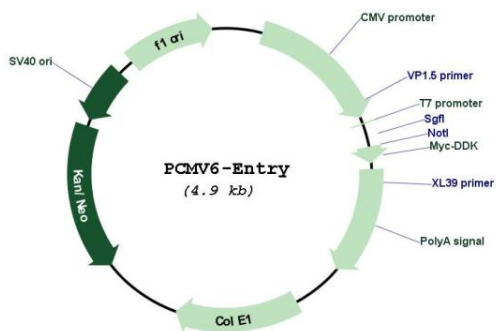


* The last codon before the Stop codon of the ORF

ACCN: NM_001130456

ORF Size:	2661 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:	<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_001130456.1 , NP_001123928.1
RefSeq Size:	3736 bp
RefSeq ORF:	2661 bp
Locus ID:	20359
UniProt ID:	O54951
Cytogenetics:	17 D
MW:	95.9 kDa
Gene Summary:	Functions as a cell surface repellent for mossy fibers of developping neurons in the hippocampus where it plays a role in axon guidance (PubMed:20484647). May function through the PLXNA4 receptor expressed by mossy cell axons (PubMed:20484647). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR221960