

Product datasheet for **RG211085**

SEMA4B (NM_198925) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA4B (NM_198925) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SEMA4B
Synonyms:	SEMAG; SemC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG211085 representing NM_198925
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGCGCACCCGATGGGCCTGAGGAGCTGGCTCGCCGCCCATGGGGCGCGCTGCCGCCTGGCCAC
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ATCCCCAGTGTGCCCGGCCCGGGTCCGCCTTGGCTCGGAGATCCGTGACTCTGTGGT

ACGGTACGCGGCCGCTCGAG – GFP Tag – GTTAA

Protein Sequence: >RG211085 representing NM_198925
 Red=Cloning site Green=Tags(s)

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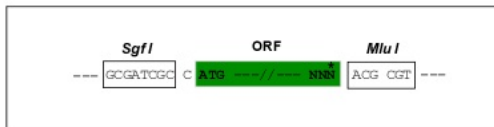
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

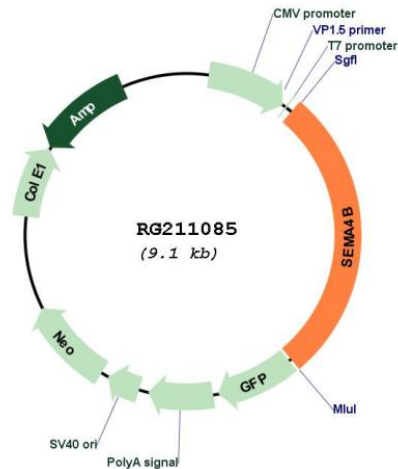
Cloning sites used for ORF Shuttling:



*EcoR*I *BamH*I *Kpn*I RBS *Sgf*I *Asc*I **Kozac Consensus**
 CTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

*Hind*III *Nhe*I *Rsr*II *Mlu*I *Not*I *Xho*I GFP Tag
 CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- --- ---
 T R T R P L E M E S D - - -

*Pme*I *Fse*I
 --- --- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT
 - - E E R V Stop

Plasmid Map:


ACCN: NM_198925

ORF Size: 2511 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_198925.1](#), [NP_945119.1](#)

RefSeq Size: 3809 bp

RefSeq ORF: 2514 bp

Locus ID: 10509

UniProt ID: [Q9NPR2](#)

Cytogenetics:	15q26.1
Protein Families:	Transmembrane
Protein Pathways:	Axon guidance
Gene Summary:	Inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons.[UniProtKB/Swiss-Prot Function]