

## Product datasheet for **MR221049**

### Sema4f (NM\_001113481) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sema4f (NM_001113481) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema4f
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR221049 representing NM\_001113481  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCTGGCCAGGGCCGAGCGGCCCGCCGGCCCGCCGGCCCGCCGCGCTCCGGTCTCTCTTCCCGCCGCGGT  
 CGTCGCTGCTGCTGCTGCTGCTGGCGATGCTGAGCGCCCCGGTGTGCGGCCGCGTCCCCCGCTCGGTGCC  
 CAGAACCTCGCTGCCATCTCCGAGGCTGACTCTATCTCACCCGGTTTGCGGCCCTCATACTGACAAT  
 TACTCTGCTCTCCTGGTGGATCTGCTTCTCACACTTTACGTCGGTGCACGGGACAGCATCTTCGCTT  
 TAACCCTGCCCTTCTCTGGGAAAAGCCTCGAAGGATCGACTGGATGGTCCCGAGACTCACAGACAGAA  
 CTGTAGGAAGAAAGGCAAGAAAGAGGACGAATGCACAATTTATCCAGATTCTCGCCATTGCCAATGCC  
 TCTCACCTCTCACGTGTGCACCTTCGCTTTTGATCCGAAGTGCGGGGTATTGATGTCCAGTTTCC  
 AGCAGGTTGAAAGACTTGAGAGTGGCCGGGGAAATGCCTTTTGAGCCAGCTCAACGGTACGACGCTGT  
 AATGGCTGGGGGCTCCTACACCGCCACTGTGAAAACTTCTGGGGACAGAGCCGATTATCTCCCGA  
 GCTGTGGGTGAGCTGAGGACTGGATTCGAACAGAGACCTTGTCATCCTGGCTTAATGCCCCAGCCTTTG  
 TCGCAGCTATGGTCTGAGCCCGCTGAGTGGGGGATGAAGATGGAGACGATGAAATCTCTTTTTCTT  
 CACGGAGACCTCCCGAGTCTTGACTCATATGAGCGCATCAAGGTCCCACGAGTGGCCCGTGTGTGTGCG  
 GGGGACCTTGGGGCCGGAAGACCTTCAGCAGAGATGGACGACGTTTCTAAAGGCTGACCTGCTGTGTC  
 CAGGGCCCGAGCATGGAAGGGCTCGGGGGTCTGCAGGATATGACAGAGCTTCGACCTCAGCCTGGCGC  
 GGGGACCCCTCTTTTATGGCATCTTTCTCCAGTGGGAAGGAGCCGCAATTTCTGCTGTGTGTGCC  
 TCCGACCCCAAGACATCCGGCAGTGTGAATGGTCCCTTTAGAGAGCTAAAACATGACTGCAACAGGG  
 GACTACCTGTGATGGACAACGAGGTGCCCCAGCCAGACCTGGAGAGTGCATCACCACAACAACTGAAGTT  
 CCAAGGATTTGGATCCTCACTCTCCCTGCCAGACCGTGTGCTCACCTTTATCAGAGACCACCCGCTCATG  
 GACAGGCCGTGTTTCCAGCTGATGGCCGCCCTGCTGGTCACTACGGATACAGCCTATCTCAGAGTTG  
 TGGCTCACCGGTGACCAGCCTCTCAGGAAAAGAAATGATGTGCTCTACCTGGGGACAGAGGATGGGCA  
 CCTCCATCGGGTGTGCGCATCGGAGCTCAGCTCAGTGTCTGGAGGATCTGGCCTTGTCCCGAAACA  
 CAGCCGGTTGAAAGCATGAAATGTACCATGATTGGCTTCTGGTGGGCTCCATACTGAGGTGACACAAG  
 TGAACACCAGCAACTGTGGCCGTCTCCAGAGCTGCTCAGAATGTATCCTGGCCAGGATCCCGTGTGTGC  
 CTGGAGCTCCGGCTCGATGCTTGTGTGGCCATGCAGGGCAGCACCGTGGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR221049 representing NM\_001113481  
 Red=Cloning site Green=Tags(s)

MLARAERPRPGPRPPVSLFPPSSLLLLLLAMLSAPVCGRVPRVSPRTSLPISEADSYLTRFAAPHTYN  
 YSALLVDPASHTLYVGARDSIFALTLFSGEKPRRIDWMPETHRQNCRKKGKKEDECHNFQILAIANA  
 SHLLTCGTFAFDPKCGVIDVSSFFQVERLESGRGKCFEPAQRSAAVMAGGVLYTAVKNFLGTEPIISR  
 AVGRAEDWIRTETLSSWLNAPAFVAAMVLSPEWGEDGDDEIFFFTETSRVLDYSYERIKVPRVARVCA  
 GDLGGRKTLQQRWTFKADLLCPGPEHGRASVQLQDMTELRPQPGAGTPLFYGIFSSQWEGAAISAVCA  
 FRPQDIRAVLNGPFRELKHCNRGLPVMNEVPQPRPGECITNNMKFQQFGSSLSLPDRVLTFRDHPLM  
 DRPVFPADGRPLLVTDTAYLRVVAHRVTSLSGKEYDVLVLGTEDEGHLHRAVRIGAQLSVLEDLALFPET  
 QPVESMKLYHDWLLVGSHTVETQVNTSNCGRQLQSCSECIQAQDPVCAWSFRLDACVAHAGEHRG

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001113481

**ORF Size:** 1662 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\\_001113481.1](#), [NP\\_001106953.1](#)

**RefSeq Size:** 2735 bp

**RefSeq ORF:** 1665 bp

**Locus ID:** 20355

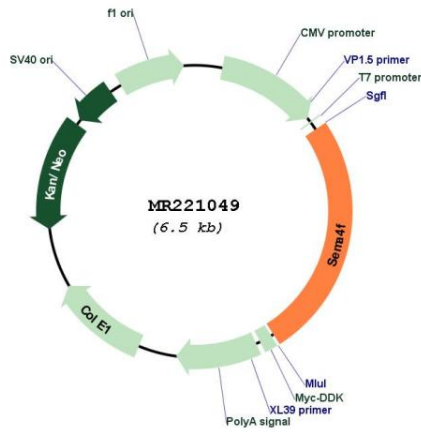
**Cytogenetics:** 6 35.94 cM

**MW:** 61.7 kDa

**Gene Summary:**

This gene encodes a member of semaphorin family of membrane-bound and secreted proteins that are involved in guiding axonal growth. The encoded protein is a transmembrane protein localized to the glutamatergic synapses via its association with a synapse-associated scaffolding protein. In oligodendrocyte precursor cells, the encoded protein contributes to the outward migration and differentiation. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, May 2015]

**Product images:**



Circular map for MR221049