

Product datasheet for **MG221049**

Sema4f (NM_001113481) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema4f (NM_001113481) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sema4f
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG221049 representing NM_001113481
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGGCCAGGGCCGAGCGGCCCGCCGGGCCCGCCGGCCCTCCGGTCTCTCTTCCCGCCGCGCT
 CGTCGCTGCTGCTGCTGCTGCTGGCGATGCTGAGCGCCCCGGTGTGCGGCCGCGTCCCCCGCTCGGTGCC
 CAGAACCTCGCTGCCATCTCCGAGGCTGACTCTATCTCACCCGGTTTGCGGCCCTCATACTGACAAT
 TACTCTGCTCTCCTGGTGGATCTGCTTCTCACACTTTACGTCGGTGCACGGGACAGCATCTTCGCTT
 TAACCCTGCCCTTCTCTGGGAAAAGCCTCGAAGGATCGACTGGATGGTGCCGAGACTCACAGACAGAA
 CTGTAGGAAGAAAGGCAAGAAAGAGGACGAATGCACAATTTTATCCAGATTCTCGCCATTGCCAATGCC
 TCTCACCTCTCACGTGTGCACCTTCGCTTTTGATCCGAAGTGCGGGGTATTGATGTGCCAGTTTCC
 AGCAGGTTGAAAGACTTGAGAGTGGCCGGGGAAATGCCTTTTGGAGCCAGCTCAACGGTACGACGCTGT
 AATGGCTGGGGGCTCCTTACACCGCCACTGTGAAAACTTCTGGGGACAGAGCCGATTATCTCCCGA
 GCTGTGGGTCGAGCTGAGGACTGGATTCGAACAGAGACCTTGTCATCCTGGCTTAATGCCCCAGCCTTGG
 TCGCAGCTATGGTCTGAGCCCGCTGAGTGGGGGATGAAGATGGAGACGATGAAATCTCTTTTTCTT
 CACGGAGACCTCCCGAGTCTTGACTCATATGAGCGCATCAAGGTCCCACGAGTGGCCCGTGTGTGTGCG
 GGGGACCTTGGGGCCGGAAGACCCTTCAGCAGAGATGGACGACGTTTCTAAAGGCTGACCTGCTGTGTC
 CAGGGCCCGAGCATGGAAGGGCTCGGGGGTCTGCAGGATATGACAGAGCTTCGACCTCAGCCTGGCGC
 GGGGACCCCTCTTTTATGGCATCTTTCTCCAGTGGGAAGGAGCCGCCATTTCTGCTGTGTGTGCC
 TTCGACCCCAAGACATCCGGCAGTGTGAATGGTCCCTTTAGAGAGCTAAAACATGACTGCAACAGGG
 GACTACCTGTGATGGACAACGAGGTGCCCCAGCCAGACTGGAGAGTGCATACCAACAACATGAAGT
 CCAGCAGTTTGGATCCTCACTCTCCCTGCCAGACCGTGTGCTCACCTTTATCAGAGACCACCCGCTCATG
 GACAGGCCGTGTTTCCAGCTGATGGCCGCCCTGCTGGTCACTACGGATACAGCCTATCTCAGAGTTG
 TGGCTCACCGGTGACCAGCCTCTCAGGAAAAGAAATGATGTGCTCTACCTGGGGACAGAGGATGGGCA
 CCTCCATCGGGTGTGCGCATCGGAGCTCAGCTCAGTGTCTGGAGGATCTGGCCTTGTCCCGAAACA
 CAGCCGGTTGAAAGCATGAAATGTACCATGATTGGCTTCTGGTGGGCTCCATACTGAGGTGACACAAG
 TGAACACCAGCAACTGTGGCCGCTCCAGAGCTGCTCAGAATGTATCCTGGCCAGGATCCCGTGTGTGC
 CTGGAGCTCCGGCTCGATGCTTGTGTGCCCATGCAGGGCAGCACCGTGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG221049 representing NM_001113481
 Red=Cloning site Green=Tags(s)

MLARAERPRPGRPPVSLFPPSSLLLLLLAMLSAPVCGRVPRSPRTPSLPISEADSYLTRFAAPHTYN
 YSALLVDPASHTLYVGARDSIFALTLPFSGEKPRRIDWMPETHRQNCRKKGKKEDECHNFIQILAIANA
 SHLLTCGTFADFPGKGVIDVSSFQOVERLESGRGKCPFEPAQRSAAVMAGGVLYATVKNFLGTEPIISR
 AVGRAEDWIRTETLSSWLNAPAFVAAMVLSPAEWGDEGDDEIFFFFETETSRVLDSEYERIKVPRVARVCA
 GDLGGRKTLQQRWTTFLKADLLCPGPEHGRASGVLQDMTELRPQPGAGTPLFYGIFSSQWEGAAISAVCA
 FRPQDIRAVLNGPFRELKHCNRLPVMNEVPQPRPGECITNNMKFQQFGSSLSLPDRVLTFRIDHPLM
 DRPVFPADGRPLLVTDDTAYLRVVAHRVTSLSGKEYDVL YLGTEDGHLHRAVRIGAQLSVLEDLALFPET
 QPVE SMKLYHDWLLVGSHTVTVNTSNCGRLLQSCSECI LAQDPVCAWSFRLDACVAHAGEHRG

TRTRPLE - GFP Tag - V

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

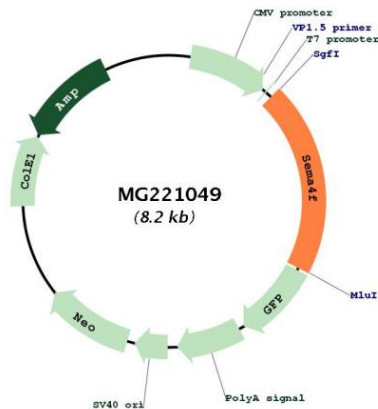
Locus ID: 20355

Cytogenetics: 6 35.94 cM

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 MG221049