

## Product datasheet for **MG223912**

### Sema5a (NM\_009154) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Sema5a (NM\_009154) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Sema5a  
**Synonyms:** 5930434A13; 9130201M22Rik; AI464145; Semaf; semF  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG223912 representing NM\_009154  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGATCGCC

ATGAAGGGAGCCTGCATCCTTGCATGGCTGTTCTCAAGCCTGGGAGTGTGGAGACTTGCTAGGCCGAGA  
 CCCAGGACCTGCCAAGTGCCAGAGAGCTGAGCACCTGTCGTCTTTACAAAGAAATTGGCCCTGGTT  
 ACGGGAGTTCAGAGCCGAGAATGCTGTGGATTTCTCGAGGTTAACATTTGACCCAGGACAGAAAGA  
 ACTTGTCTGATGAGCGAGAAACTATCTCTTCAGATTAGAGCTTGAGGATCTGTCTCTCATCCAGGCTGTGGAGT  
 GGGAGTGTGACGAAGCCACCAAGAAGGCCTGTTACAGCAAGGGCAAATCGAAGGAGGAATGTCAGAACTA  
 CATACGAGTGCTCTTAGTTGGTGGGACCGGCTATTCACCTGTGGGACCAATGCCTTCACACCTGTCTGT  
 ACCATCCGCTCGTTAAGTAACCTGACTGAGATCCATGATCAGATCAGTGGCATGGCCCGCTGTCCCTACA  
 GTCCCCAGCACAATTCTACCGCCCTACTCACTGCCAGTGGTGAGCTCTATGCTGCAACAGCCATGGATTT  
 CCCAGGGCGAGATCCAGCCATTTACCGAAGTCTGGGCACCTTGCCTCCTCTTCGAACTGCACAGTACAAC  
 TCCAAATGGCTCAATGAACCAAATTTGTGTCTTCTACGACATCGGAAATTTCACTACTTCTTCTTCC  
 GAGAAAACGCCGTGGAACATGACTGTGGGAAGACGGTGTCTCCAGGGCTGCCGGGTCTGTA AAAATGA  
 CATTGGAGGGCGATTTCTTCTGGAGGACACCTGGACTACCTTCATGAAGGCTCGCCTCAACTGCTCCCGG  
 CCTGGTGAGGTGCCCTTCTACTACAATGAGCTGCAGGTACTTTCTTCTGCCCAGGCTGGATCTGATCT  
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 CTCACAGGCCCTTCAATGGACCTTCAAGTACCAAGAAAATCTCGCTCAGCCTGGCTGCCTTATCCCAAC  
 CCCAACCCCAATTTTTCAGTGCGGCACCATGGACCAGGGCCTGTACGTAACCTGACGAAAGAAACCTAC  
 AGGATGCTCAGAAGTTCATTCTGATGCATGAAGTGGTGCAGCCAGTGACCACAGTGCCCTTTTCATGGA  
 GGACAACAGCCGCTTCTCCCACTAGCTGTTGATGTTGTGCAAGGCAGGGAGACTCTGGTCCACATCATT  
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 TGCTGGAAGAGATTGAGCTTTTCCAGAGAGGAGGAGTGAGCCCATCAGGAGCCTGCAGATCCTCCACAG  
 CCAGAGTGTCTATTTGTGGGACTACAGGAGCATGTGGCAAGATCCCCCTGAAGAGGTGCCACTTCCAT



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CAAACACGCAGTGCCTGCATTGGCGCTCAGGACCCTTACTGTGGCTGGGATGCGGTGATGAAGAAATGCA  
 CCAGCCTGGAGGAGAGTCTGAGCATGACCCAGTGGGATCAGAGCATCCCCACCTGTCCGACCAGAAATCT  
 CACTGTAGATGGGAGCTTTGGCCATGGTCACCGTGGACACCCTGTACACACACTGATGGCACTGCTGTG  
 GGCTCCTGCCTCTGCCGGTCCCCTCCTGTGACAGCCAGCTCCTCAGTGTGGTGGTTGGCAGTGTGAGG  
 GCCCTAGAATGGAGATCACCAACTGTTCCAGGAATGGAGGCTGGACTCCCTGGACCTCCTGGTCTCCGTG  
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 GGGCGCGTGTGCGTGGGCCAGAACAGGGAAGATACTGCAATGAACATTTGCTCTGCCACCACACG  
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 ACTATGAGCAGCGTTTCCGCTATACCTGTAAGGCTCGCCTGCCAGATCCAAATTTGCTGGAAGTAGGAAG  
 ACAGAGGATAGAAATGCGGTACTGTTCCAGCGATGGAACCAGTGGCTGCTCCACAGACGGACTTTCTGGA  
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 GTTTGGGGCATGCCATGCCTTGGCCATCGCTGGAGTCCAGGAATGCAACATTTTACCTTGCCAGTG  
 GATGGTGTGGTCTTGCTGGTATCCTGGTCTAAATGTTGAGCAACCTGTGGAGGTGGCCACTACATGA  
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 GGCACTCTGCAACACACAGACCTGCCAGAAAGCTGGTCAGAGTGGTCAGACTGGTCTGTGTGCGATGCA  
 TCTGGTACCCAGGTCCGTGCTCGCAGTGCATCCTTCTGTTTCCAGTGGGCGCAATGTTCTGGAATA  
 CTACAGAGAGCCGGCCTTGTGTATTTGACTCTAATTTTATCCAGAAATATCTGTGGCAAGATCCAGCAG  
 CGTAGAAGAAAAAGGTGGAGAGTTCACATGTTCCACATGATGGCCGTGGGCTTAGCAGTTCATT  
 CTTGGCTGCCTCCTCACACTGCTTGTCTACACCTACTGCCAGAGTACCAGCAGCAGTCCCATGATGCAA  
 CTGTCTCCACCCTGTCTCCTGCCGCCCTCAACAGCAGCATAACTAACCACATCAACAACTGGACAA  
 ATATGATTCTGTGGAGGCATCAAGGCATTTAACAAAAACAACCTTGATCCTAGAGGAGAGAAACAATAC  
 TTCAACCCACATCTCACTGGGAAGACCTATTCCAACGCCTACTTTACAGATCTCAACAATTATGATGAAT  
 AC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG223912 representing NM\_009154  
 Red=Cloning site Green=Tags(s)

MKGACILAWLFSSLGVWRLARPETQDPKACQRAEHPVVSYKEIGPWLREFRAENAVDFSRLTFDPGQKEL  
 VVGARNYLFRLLEDLSLIQAVEWECDEATKKACYSKSKSKEECQNYIRVLLVGGDRLFTCGTNAFTPVC  
 TIRSLSNLTIHQIISGMARCPYSPQHNSALLTASGELYAATAMDFPGRDPAIYRSLGTLPLRRTAQYN  
 SKWLNPNFVSSYDIGNFTYFFRENAVEHDCGKTVFSRAARVCKNDIGGRFLLEDWTTFMKARLNCSR  
 PGEVPPFYNELQGTFFLPELDLIYGIFFTNVNSIAASAVCVFNLSAISQAFNGPFKYQENSRSAWLPYPN  
 PNPNFQCGTMDQGLYVNLTERNLQDAQKFLMHEVVQPVTVPVPSFMEDNSRFSHLAVDQVQGRETLVHII  
 YLATDYGTIKKVRAPLSQSSGSLLEEIELFPERRSEPIRSLQILHSQSVLQVGLQEHVAKIPLKRCHF  
 QTRSACIGAQDPYCGWDAVMKKCTSLSESLSMTQWDQSIPTCPTRNLTVDGSFGPWPWPCTHTDGTAV  
 GSCLCRSRSCDSPAPQCGGWQCEGPRMEITNCSRNGGWPWTSWSPCSTTCGIGFQVRQRSCSNPTPRHG  
 GRVCGVQNRREERYCNEHLLCPPHFVFTGWGPWERCTAQCGGGIQARRRTECENGPDCAGCNVEYQPCNTNA  
 CPELKKTTPWTPVNI SDNGGHYEQRFYRCKARLPDPNLLVGRQRIEMRYCSSDGTSGCSTDGLSG  
 DFLRAGRYSAHTVNGAWSAWTSWSQCSRDCSRGIRNRKRVNNPEPKFGGMPCLGPSLEFQECNII LCPV  
 DGWWSWSSWKSATCGGGHYMRTRSCSNPAPAYGGDICLGLHTEALCNTQTCPEWSWSDWSDVCD  
 SGTQVRARQCILLFPVGSQCSGNTTESRCPVFDNSNFIPEVSVARSSSVEEKRCGEFNMFMMAVGLSSSI  
 LGCLLTLVYTYCQRYQQSHDATVIHPVSPAALNSSITNHINKLDKYDSVEAIKAFNKNLILEERNKY  
 FNPHLTGKTSNAYFTDLNNDYDEY

TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_009154

ORF Size: 3222 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

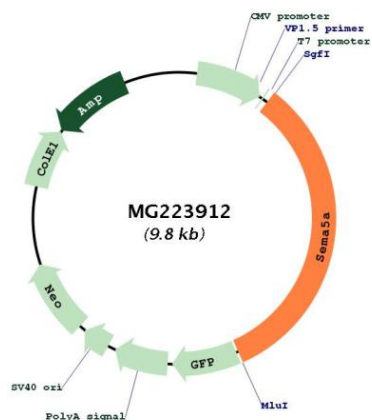
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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\\_009154.2](#), [NP\\_033180.2](#)  
 RefSeq Size: 10809 bp  
 RefSeq ORF: 3225 bp  
 Locus ID: 20356  
 Cytogenetics: 15 13.02 cM

**Product images:**



Circular map for MG223912