

Product datasheet for **SC113874**

SEMA4G (NM_017893) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA4G (NM_017893) Human Untagged Clone
Tag:	Tag Free
Symbol:	SEMA4G
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_017893, the custom clone sequence may differ by one or more nucleotides

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ATGTGGGGGAGGCTCTGGCCCTCCTCCTCAGCATCCTCACAGCAACTGCAGTCCCAGGACCTCACTGC
GGAGACCGTCTAGAGAACTAGATGCCACCCTCGGATGACCATACCCTATGAAGAGCTCTCTGGGACCCG
GCACTTCAAGGGCAAGCCAGAACTACTCAACTGCTGCTGGAGGAGGCTCAGCAAGGCTGCTGGT
GGAGCCGAGGTGCCCTGTTCTCTCAGTGCCAACGACATAGGAGATGGGGCTCACAAAGAGATCCACT
GGGAAGCCTCCCCAGAGATGCAAAGCAAATGTCATCAAAAAGGGAAAAACAACCAGACGGAGTGTTTAA
CCATGTGCGGTTCTGCAGCGGCTCAATTCTACCCACCTCTATGCATGTGGGACTCACGCCTTCCAGCCC
CTCTGTGCAGCCATTGATGCTGAGGCTTACCTTGCCAACCAGCTTCGAGGAGGGGAAGGAGAAGTGTC
CTTATGACCCAGCCGTTGGCTTACAGGCTCATCATTGATGGAGGCTTACACAGCCACTAGGTATGA
ATTCCGGAGCATTCTGACATCCGCCGGAGCCGCCACCCACACTCCCTGAGAAGTGGAGACACCAATG
CATTGGCTCAATGATGCGGAGTTTGTGTTCTCCGTCTCGTGGGAGAGCAAGGCCAGTGCAGTGGGTG
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CCGACAGCTCACCGTGTGGCCGTGTGGCTCGTGTGCAAGGAGACCTGGGAGGGAAGAAGTCCCTG
CAGAAGAAGTGGACTTCCTTCTGAAAGCCGTCTCATCTGCCACATTCCACTGTATGAGACACTGCGTG
GGGTCTGCAGCCTGGATGCTGAAACCTCAAGCCGTACACACTTCTATGCAGCCTTACGCTGAGCACACA
GTGGAAGACCCTGGAGGCTCAGCCATCTGCCGTATGACCTGGCAGAGATCCAGGCTGTCTTTCAGGA
CCCTATATGGAATACCAGGATGGTTCCCGGCGTGGGGTGCATATGAGGGTGGGGTGCCTGAGCCCCGGC
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CCTGACTTTGTAAGTTGCACCCACTGATGGCTCGGCCGTTGTGCCACACGTGGACGGCCCCCTGCTG
CTCAAGCGCAACATACGCTACACACACCTTACAGGGACACTGTACCACGCTTGGACTACCTATG
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TATTGAAGAGACACAAGTGTTCAGGGAGTCCCAGTCTGTGAAAAATCTAGTCATCTCTATTGCAGCAC
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GCTATGACTGCATCTTGGCCGAGACCCCTACTGTGGCTGGGACCCTGGCACCCATGCCTGCGCAGCAGC
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GGCTGTGAGAGCAGCAGGGATACAGGGCCACCACCACCTGAAGACCCGCTCTGTGCTCCGGGGTATG
ATGTCTCCTGCCCTGTGACCAGCCATCCAACCTGGCCCGGGCTTGTGGCTACTCAATGGGAGCATGGG
CCTGAGCGATGGGCAGGGTGGCTACCGTGTGGCGTGGACGGGCTGCTGGTTACAGATGCACAGCCTGAG
CACAGTGGCAACTATGGCTGCTATGCCGAGGAAAATGGCCTCCGCACCCTGCTGGCTCCTATAGTCTCA
CAGTCCGGCCAGCCACTCCTGCCCCAGCTCCAAAAGCCCTGCCACACCTGGGGCACAGCTGGCACCTGA
TGTGAGACTGCTCTATGTGCTAGCCATTGCCGCGCTTGGTGGCCTCTGCCTCATCCTGGCCTCCTCCCTC
CTCTATGTGGCCTGTCTGCGGGAAGGCAGACGAGGGCGCCGACGGAAATACTCACTGGGTGGGCCAGCC
GGGCAGGAGGATCTGCGGTGCAACTGCAGACAGTCTCAGGCCAGTGTCTGGAGAGGAAGATGAGGGTGA
TGATGAGGGGGCTGGGGGCTGGAGGGCAGCTGTCTCCAGATCATCCCTGGGAGGGAGCCCCAGCCCCA
CCACCCCAACCGCCCCACCGCCACCGGCTGAGCTGACCAATGGCTTGGTGGCACTGCCAGCCGGCTGC
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CTTCGCCGAGGAACTCAGCCGCATCCTGAAAAAAGGAAGCACACGCAGCTCGTGGAGCAGCTAGATGAG
AGCTCTGTCTGA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_017893 unedited</p> <p>CAGCATTGTGAATACGACTCACTATAGGGCGGCCGCGNATTCGGCACGAGGCTTCATTAC CCCCCTCCATACCCTTCTCCCACTTTTGTATGTCCTGTAGGGCTGGCCAGTCAGGCC AGCCAAAGCCCCCTCCTCAGTCTCCACAGACCCACATGTGAGCAGCCAGGCCATCGGT GCTCCTCAGAGGCAGGGCTCTGCAGGTCATATGGGCTCAATGTCACCACCCTCTGCATG GCCCTGTGTGCTGGATGGTCTGAAACCCAGACAAGTCTCTGCCAGCCACCTAAGCCCTG CGTACATTACATGCACACATGGAAGAATGTTTATCGGCTGGGCTGCAGTGCCCCCACC TCACCTTCTCCTGGTGCATTCTTGTTCATCCCTGCTTCTGGACTTGGGTACCCTCCA ATTGCCACATCCTATCTGGTCTCTTCCCAGCCCCATGTGGTGACCTCTTTGTCAAGAG CTTGGGAACGGGCCAGCCTGGGGAGGTAAGACTGCATCACTCCCCTCCTCTCCCTTCTG TGTGGCCCTTGTGAATCAGCCTCCCCTCCTTGGTCACTTCTCAAGAGTATGAGAGAC AGAGCTCCAGGCATGTCCATCCCATGCACATGTGTAACACACACCTGTATCACACAT GTGCTTACATTTCCACTCACATGCACCTCTGAGCCTCCCTTGTGTCTTGGACCTGTCTG TTGGGTTTAGTCCGTGGACATTTAGAGGGAGATCCCNCTCCATTTAACTGTCCTCACA GGCCCTTGNCTAGATGGATGACCAACTGCACCTCAATGAGCCAGCCTCTTTTGGGG AATCAAGCATTTGCTTCTCTAGACTACAGCANGNAAAGGNAGGAGAAATCTGATGTCT CAACTGGCACATGAAAGCCATTCCTGGAATATNGCAAGGGCANNAGCTGGAGTTGGCA CGCTTN</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_017893 unedited</p> <p>CGGCCGAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGGGGAAAA AGGTGTTTATTAACCAACGGCAGGGGAGGAGCTGAACCAAGCTCCCCACTCTGTCACA TGCTGTTCACCCACCTGGTTGTAAGTGGGGCATTCTAAAGAAGGTAGCCATTCTC ACAATAAATACATTTCATTGTGGGGTGGAGTGGGAAAGGTTGGGTGAAGGGCAATAAAAA CCCGTGGGATTCCACGTTCTCAGCTACAAAAATAACAGTCATCCTCACCCGAGGGGAATG GGGGAGCTCAATCAGAATTGATTGTCCATATAGGCCTAAAGACTTCAGAGGCCCTGGC CCCTGAAAGTGGCCCGGTGAGGTAGGACAGGGGTAGGAACTAAACGTCCAAACTCCCAGC CTCTGCCCTTTGCATAGTTCCAAGAATGGGCTTCATGTGCCAGTTGAGACATCAATTTT TCCTCCCTTTCCCTGCTGTAGTCTAAAGGAAGCAAATGCTTATTCCCCAAAAGAGAGG CTGGCTCATTGAGTGCAGTGTGGTTCATCCATCCTAAGCAAGGGCCTGTGAGGACAGTTA AATGGGAGGGGGATCTCCCTCTGAAATGTCCACGACTAAACCCAACAGACAGGTCCAAG ACAGCAAGGGGAGGCTCANAGGTGCATGTGAGTGGAAATGAAGCACATGTGTGATACAGGT GTGTGTTACACATGTGCATGGGATGGGAATGCCTGGACTCTGCTCTACTCTTGAATG ACANGANAGGGGAGCTGATCACAGGCCACACAGAGGGAAGAGGGGATGATCATTTACT CCCAGCTGGCCCAAGCTCTGAAAAAGTACCATGGGGCTGGGAAAAGACAAAAGATTGC ATNGGAAGTCCCAATCAAACAGATAACGATGCAGG</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_017893
Insert Size:	1330 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_017893.1](#), [NP_060363.1](#)

RefSeq Size: 4415 bp

RefSeq ORF: 384 bp

Locus ID: 57715

UniProt ID: [Q9NTN9](#)

Cytogenetics: 10q24.31

Protein Families: Transmembrane

Protein Pathways: Axon guidance

Gene Summary: Semaphorins are a large family of conserved secreted and membrane associated proteins which possess a semaphorin (Sema) domain and a PSI domain (found in plexins, semaphorins and integrins) in the N-terminal extracellular portion. Based on sequence and structural similarities, semaphorins are put into eight classes: invertebrates contain classes 1 and 2, viruses have class V, and vertebrates contain classes 3-7. Semaphorins serve as axon guidance ligands via multimeric receptor complexes, some (if not all) containing plexin proteins. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).