

Product datasheet for **RC234743**

SEMA4G (NM_001203244) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA4G (NM_001203244) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SEMA4G
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC234743 representing NM_001203244
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTGGGGGAGGCTCTGGCCCTCCTCCTCAGCATCCTCACAGCAACTGCAGTCCCAGGACCCTCACTGC
GGAGACCGTCTAGAGAACTAGATGCCACCCTCGGATGACCATACCCTATGAAGAGCTCTCTGGGACCCG
GCACTTCAAGGGCCAAGCCAGAACTACTCAACTGCTGCTGGAGGAGGCCTCAGCAAGGCTGCTGGTG
GGAGCCCGAGGTGCCCTGTTCTCTCAGTGCCAACGACATAGGAGATGGGGCTCACAAAGAGATCCACT
GGGAAGCCTCCCAGAGATGCAAAGCAAATGTCATCAAAAAGGGAAAAACAACCAGACGGAGTGCTTTAA
CCATGTGCGGTTCTGCAGCGGCTCAATTCTACCCACCTCTATGCATGTGGGACTCACGCCTCCAGCCC
CTCTGTGCAGCCATTGATGCTGAGGCCTCACCTTGCCAACCAGCTTCGAGGAGGGGAAGGAGAAGTGTC
CTTATGACCCAGCCCGTGGCTTACAGGCCTCATATTGATGGAGCCTCTACACAGCCACTAGGTATGA
ATTCGGGAGCATTCTGACATCCGCCGGAGCCGCCACCCACACTCCCTGAGAAGTGAAGAGACCAATG
CATTGGCTCAATGATGCGGAGTTTGTGTTCTCCGTCTCGTGCGGGAGAGCAAGGCCAGTGCAGTGGGTG
ATGATGACAAGGTGTAATACTTCTTACGGAGCGTGCCACTGAGGAGGGCTCTGGCAGTTCCTCAAGAG
CCGACAGCTCACCGTGTGGCCGTGTGGCTCGTGTGCAAGGGAGACCTGGGAGGGAAGAAGATCCTG
CAGAAGAAGTGGACTTCTTCTGAAAGCCCGTCTCATCTGCCACATTCCTGTATGAGACACTGCGTG
GGGTCTGCAGCCTGGATGCTGAAACCTCAAGCCGTACACACTTCTATGCAGCCTTACGCTGAGCACACA
GTGGAAGACCTGGAGGCCTCAGCCATCTGCCGCTATGACCTGGCAGAGATCCAGGCTGTCTTTCAGGA
CCCTATATGGAATACCAGGATGGTTCCCGGCGCTGGGGTCGCTATGAGGGTGGGGTGCCTGAGCCCCGGC
CTGGCTCGTGTATCACAGATTCATTGCGCAGCCAAGGCTACAATTCATCCCAAGACTTGCCATCCCTGGT
CCTGGACTTTGTAAAGTTGCACCCACTGATGGCTCGGCCCGTTGTGCCACACGTGGACGGCCCCCTGTG
CTCAAGCGCAACATACGCTACACACACCTTACAGGGACACCTGTACACACGCTGTGGACCTACCTATG
ACCTGCTCTTTCTGGGCACAGCTGATGGCTGGATCCACAAGGCCGTAGTCTGGGCTCTGGGATGCACAT
TATTGAAGAGACACAAGTGTTCAGGGAGTCCCAGTCTGTGAAAAATCTAGTCATCTCTATTGCAGCAC
AGCCTCTATGTGGGGCTCCTAGCGGAGTCATCCAGTACCCTCTCCAGCTGCTCCCGTACCGATCCT
GCTATGACTGCATCTTGGCCCGAGACCCCTACTGTGGCTGGGACCCTGGCACCCATGCCTGCGCAGCAGC
CACCACCATAGCCAACAGGTCCCAGGGAAGCAGGACAGCACTGATACAGGACATAGAGAGAGGAAATCGA
GGCTGTGAGAGCAGCAGGATACAGGCAGGGCTCTGCAGGTCCATATGGGCTCAATGTCACCACCCTCTG
CATGGCCCTGTGTGCTGGATGGTCTGAAACCAGACAAGACCTCTGCCAGCCACCTAAGCCCTGCGTACA
TTCACATGCACACATGGAAGAATGTTTATCGGCTGGGCTGCAGTGCCCCCACCCTCACCTTCTCCTGGTG
CATTCTTGTTCATCCCTGCTTCTGGACTTGGGGTACCCTCCCAATTGCCACATCCTATCTGGTCTCTT
CCCCAGCCCCATGTGGTACCTCTTGTCAAGAGCTTGGGAACGGGCCAGCCTGGGGAGGTAAGACTGCA
TCACTCCCCTCTCTCCCTTCTGTGTGGCCCTTGTGAATCAGCCTCCCCACTCTCCTTGGTCATTCTCA
AGAGTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234743 representing NM_001203244
 Red=Cloning site Green=Tags(s)

MWGRLWPLLLSILTATAVPGPSLRPSRELDATPRMTIPYEELSGTRHFKGQAQNYSTLLLEEASARLLV
 GARGALFSLSANDIGDGAHKEIHWEASPEMQSKCHQKGNQTECFNHVRFQLRNLSTHL YACGTHAFQP
 LCAAIDAFAFTLPTSFEEGKEKCPYDPARGFTGLIIDGGLYTATRYEFRSIPDIRRSRHPHSLRTEETPM
 HWLNDAEFVFSVLVRESKASAVGDDDKVYFFTERATEEGSGSFTQSRSSHRVARVARVCKGDLGGKKIL
 QKKWTSFLKARLICHIPLYETLRGVCSLDAETSSRTHFYAAFTLSTQWKLEASAICRYDLAEIQAVFAG
 PYMEYQDGSRRWGRYEGGVPEPRPGSCITDSLRSQGYNSSQDLPSLVLDFVKLHPLMARPVVPTGRPLL
 LKRNIRYTHLTGTPVTTAGPTYDLLFLGTADGWIHKAVVLGSGMHIIEETQVFRESQSVENLVISLLQH
 SLYVYGAPSGVIQLPLSSCSRYRSCYDCILARDPYCGWDPGTHACAAATTIANRSQGSRTALIQDIERNR
 GCESSRDTGRALQVHMGSMPSPSAWPCVLDGPETROQLCQPPKPCVHSHAHMEECLSAGLQCPHPHLLL
 HSCFIPASGLGVPSQLPHPIWSSSPAPCGDLFVKSLGTGQPGEVRLHHSPLPLSCVALVNQPPHSPWFS
 RV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001203244

ORF Size: 2106 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_001203244.1](#), [NP_001190173.1](#)

RefSeq Size: 3230 bp

RefSeq ORF: 2109 bp

Locus ID: 57715

UniProt ID: [Q9NTN9](#)

Cytogenetics: 10q24.31

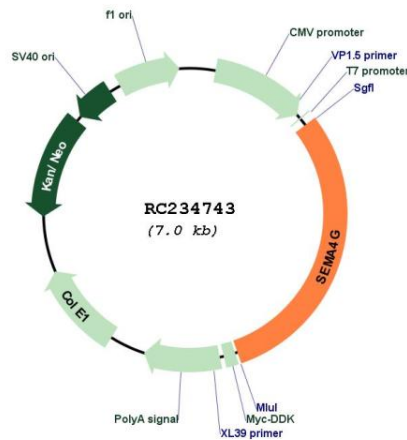
Protein Families: Transmembrane

Protein Pathways: Axon guidance

MW: 78 kDa

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]

Product images:



Circular map for RC234743