OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG234743

SEMA4G (NM_001203244) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA4G (NM_001203244) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SEMA4G
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG234743 representing NM_001203244
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGGGGAGGCTCTGGCCCCTCCTCCTCAGCATCCTCACAGCAACTGCAGTCCCAGGACCCTCACTGC
GGAGACCGTCTAGAGAACTAGATGCCACCCCTCGGATGACCATACCCTATGAAGAGCTCTCTGGGACCCG
GCACTTCAAGGGCCAAGCCCAGAACTACTCAACACTGCTGCTGGAGGAGGCCTCAGCAAGGCTGCTGGTG
GGAGCCCGAGGTGCCCTGTTCTCTCTCAGTGCCAACGACATAGGAGATGGGGCTCACAAAGAGATCCACT
GGGAAGCCTCCCCAGAGATGCAAAGCAAATGTCATCAAAAAGGGAAAAACAACCAGACGGAGTGCTTTAA
CCATGTGCGGTTCCTGCAGCGGCTCAATTCTACCCACCTCTATGCATGTGGGACTCACGCCTTCCAGCCC
CTCTGTGCAGCCATTGATGCTGAGGCCTTCACCTTGCCAACCAGCTTCGAGGAGGGGAAGGAGAAGTGTC
CTTATGACCCAGCCCGTGGCTTCACAGGCCTCATCATTGATGGAGGCCTCTACACAGCCACTAGGTATGA
ATTCCGGAGCATTCCTGACATCCGCCGGAGCCGCCACCCACACTCCCTGAGAACTGAGGAGACACCAATG
CATTGGCTCAATGATGCGGAGTTTGTGTTCTCCGTCCTCGTGCGGGAGAGCAAGGCCAGTGCAGTGGGTG
ATGATGACAAGGTGTACTACTTCTTCACGGAGCGTGCCACTGAGGAGGGCTCTGGCAGCTTCACTCAGAG
CCGCAGCAGTCACCGTGTGGCCCGTGTGGCTCGTGTCTGCAAGGGAGACCTGGGAGGGAAGAAGATCCTG
CAGAAGAAGTGGACTTCCTTCCTGAAAGCCCGTCTCATCTGCCACATTCCACTGTATGAGACACTGCGTG
GGGTCTGCAGCCTGGATGCTGAAACCTCAAGCCGTACACACTTCTATGCAGCCTTCACGCTGAGCACACA
GTGGAAGACCCTGGAGGCCTCAGCCATCTGCCGCTATGACCTGGCAGAGATCCAGGCTGTCTTTGCAGGA
CCCTATATGGAATACCAGGATGGTTCCCGGCGCTGGGGTCGCTATGAGGGTGGGGTGCCTGAGCCCCGGC
CTGGCTCGTGTATCACAGATTCATTGCGCAGCCAAGGCTACAATTCATCCCAAGACTTGCCATCCCTGGT
CCTGGACTTTGTAAAGTTGCACCCACTGATGGCTCGGCCCGTTGTGCCCACACGTGGACGGCCCCTGCTG
CTCAAGCGCAACATACGCTACACACACCTTACAGGGACACCTGTCACCACGCCTGCTGGACCTACCTATG
ACCTGCTCTTTCTGGGCACAGCTGATGGCTGGATCCACAAGGCCGTAGTCCTGGGCTCTGGGATGCACAT
TATTGAAGAGACACAAGTGTTCAGGGAGTCCCAGTCTGTGGAAAATCTAGTCATCTCTCTATTGCAGCAC
AGCCTCTATGTGGGGGCTCCTAGCGGAGTCATCCAGCTACCACTCTCCAGCTGCTCCCGCTACCGATCCT
GCTATGACTGCATCTTGGCCCGAGACCCCTACTGTGGCTGGGACCCTGGCACCCATGCCTGCGCAGCAGC
CACCACCATAGCCAACAGGTCCCAGGGAAGCAGGACAGCACTGATACAGGACATAGAGAGAGGAAATCGA
GGCTGTGAGAGCAGCAGGGATACAGGCAGGGCTCTGCAGGTCCATATGGGCTCAATGTCACCACCCTCTG
CATGGCCCTGTGTGCTGGATGGTCCTGAAACCAGACAAGACCTCTGCCAGCCACCTAAGCCCTGCGTACA
TTCACATGCACACATGGAAGAATGTTTATCGGCTGGGCTGCAGTGCCCCCACCCTCACCTTCTCCTGGTG
CATTCTTGTTTCATCCCTGCTTCTGGACTTGGGGTACCCTCCCAATTGCCACATCCTATCTGGTCCTCTT
CCCCAGCCCCATGTGGTGACCTCTTTGTCAAGAGCTTGGGAACGGGCCAGCCTGGGGAGGTAAGACTGCA
TCACTCCCCTCCTCTCCCTTCCTGTGTGGCCCTTGTGAATCAGCCTCCCCACTCTCCTTGGTCATTCTCA
AGAGTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

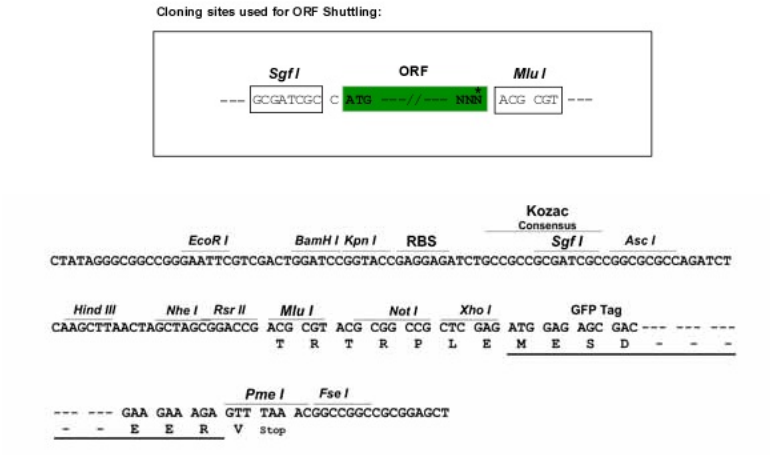
>RG234743 representing NM_001203244
Red=Cloning site Green=Tags(s)

MWGRLWPLLLSILTATAVPGPSLRRPSRELDATPRMTIPYEELSGTRHFKGQAQNYSTLLLEEASARLLV
GARGALFSLSANDIGDGAHKEIHWEASPEMQSKCHQKGKNNQTECFNHVRFLQRLNSTHLYACGTHAFQP
LCAAIDAEAFTLPTSFEEGKEKCPYDPARGFTGLIIDGGLYTATRYEFRSIPDIRRSRHPHSLRTEETPM
HWLNDAEFVFSVLVRESKASAVGDDDKVYYFFTERATEEGSGSFTQSRSSHRVARVARVCKGDLGGKKIL
QKKWTSFLKARLICHIPLYETLRGVCSLDAETSSRTHFYAAFTLSTQWKTLEASAICRYDLAEIQAVFAG
PYMEYQDGSRRWGRYEGGVPEPRPGSCITDSLRSQGYNSSQDLPSLVLDFVKLHPLMARPVVPTRGRPLL
LKRNIRYTHLTGTPVTTPAGPTYDLLFLGTADGWIHKAVVLGSGMHIIEETQVFRESQSVENLVISLLQH
SLYVGAPSGVIQLPLSSCSRYRSCYDCILARDPYCGWDPGTHACAAATTIANRSQGSRTALIQDIERGNR
GCESSRDTGRALQVHMGSMSPPSAWPCVLDGPETRQDLCQPPKPCVHSHAHMEECLSAGLQCPHPHLLLV
HSCFIPASGLGVPSQLPHPIWSSSPAPCGDLFVKSLGTGQPGEVRLHHSPPLPSCVALVNQPPHSPWSFS
RV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001203244

ORF Size: 2106 bp

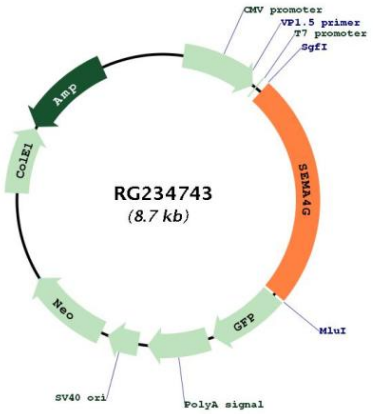
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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
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 RG234743