

Product datasheet for **SC323738**

SEMA4A (NM_022367) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA4A (NM_022367) Human Untagged Clone
Tag:	Tag Free
Symbol:	SEMA4A
Synonyms:	CORD10; RP35; SEMAB; SEMB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_022367.2
GGCATGATGGGCACCTGGAGGGCCGCACTCCCCTCCAGCCAGGCTGAGCCTTCTGTCCC
CTGCCTCTGGGGCTGGGAACCCCTTCTTCTTCTCCTGAATGGACCCCGCCCTAG
AATCCAGACACCGAGTTTCCCACTGTGGCTGGTTCAAGGGTATGTGAGAGCTCCCTGGTG
ACAGTCTGTGGCTGAGCATGGCCCTCCAGCCCTGGGCCTGGACCCTGGAGCCTCCTGG
GCCTTTTCTTCCAAGTCTCAGCTGCTGCTGCCGACGACGACCGGGGGGAGGCG
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TCTTCCACCAGAAGGGCTCCAGGATTTGACACTCTGCTCCTGAGTGGTATGAAATA
CTCTCTACGTGGGGCTCGAGAAGCCATTCTGGCCTTGGATATCCAGGATCCAGGGTCC
CCAGGCTAAAGAACATGATACCGTGGCCAGCCAGTGACAGAAAAAGAGTGAATGTGCT
TTAAGAAGAAGCAATGAGACACAGTGTTCACCTTCATCCGTGCTGCTGTTTCTTACA
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AGCCTGTCCTCAAGACGACAACCTCCTCCGCTGGCTGCATCATGACGCCTCCTTTGTGG
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GCGAAAAGCTGCTGCAGAAGAAGTGGACCACCTTCTGAAGGCCAGCTGCTGCACCC
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ATTTCTGATGGATGAGCAAGTGGTGGGACGCCCTGCTGGTGAATCTGGCGTGGAGT
ATACACGGCTTGAGTGGAGACAGCCAGGGCCTTGATGGGCACAGCCATCTTGTCATGT
ACCTGGGAACCACACAGGGTCGCTCCACAAGGCTGTGGTAAGTGGGACAGCAGTGCTC



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ATCTGGTGAAGAGATTGAGCTGTTCCCTGACCCTGAACCTGTTGCGAACCTGCAGCTGG
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CTTTACCCTAGCTGACCCTTCACTCTCCCCCTCCCTTTTCTTTGTTTTGGGATTCAG
AAAAGTCTTGTGAGAGACTGTTTATTTTTTATTAATAAGGCTTAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
    
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- Restriction Sites:** ECoRI-NOT
- ACCN:** NM_022367
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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:	<ol style="list-style-type: none">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_022367.2 , NP_071762.2
RefSeq Size:	3257 bp
RefSeq ORF:	2286 bp
Locus ID:	64218
UniProt ID:	Q9H3S1
Cytogenetics:	1q22
Domains:	Sema, PSI, PSI
Protein Families:	Transmembrane
Protein Pathways:	Axon guidance
Gene Summary:	<p>This gene encodes a member of the semaphorin family of soluble and transmembrane proteins. Semaphorins are involved in numerous functions, including axon guidance, morphogenesis, carcinogenesis, and immunomodulation. The encoded protein is a single-pass type I membrane protein containing an immunoglobulin-like C2-type domain, a PSI domain and a sema domain. It inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons. It is an activator of T-cell-mediated immunity and suppresses vascular endothelial growth factor (VEGF)-mediated endothelial cell migration and proliferation in vitro and angiogenesis in vivo. Mutations in this gene are associated with retinal degenerative diseases including retinitis pigmentosa type 35 (RP35) and cone-rod dystrophy type 10 (CORD10). Multiple alternatively spliced transcript variants encoding different isoforms have been identified.[provided by RefSeq, Sep 2010]</p> <p>Transcript Variant: This variant (1) is the longest transcript. Variants 1-3 encode the same isoform (1).</p>