

Product datasheet for **SC331154**

SEMA4A (NM_001193301) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SEMA4A (NM_001193301) Human Untagged Clone
Tag:	Tag Free
Symbol:	SEMA4A
Synonyms:	CORD10; RP35; SEMAB; SEMB
Vector:	pCMV6-Entry (PS100001)



[View online »](#)

Fully Sequenced ORF: >SC331154 representing NM_001193301.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

ATGGCCCTCCCAGCCCTGGGCCTGGACCCCTGGAGCCTCCTGGGCCTTTTCTCTTCCAACCTGCTTCAG
CTGCTGCTGCCGACGACGACCCGCGGGGGAGGCGGGCAGGGGCCATGCCAGGGTCAGATACTATGCA
GGGGTGAACGTAGGGCACTTAGCTTCTCCACCAGAAGGGCCTCCAGGATTTTGACACTGCTCCTG
AGTGGTGAAGAACTCTCTACGTGGGGCTCGAGAAGCCATTCTGGCCTTGGATATCCAGGATCCA
GGGGTCCCAGGCTAAAGAACATGATACCGTGGCCAGCCAGTGACAGAAAAAAGAGTGAATGTGCCTTT
AAGAAGAAGAGCAATGAGACACAGTGTTTCAACTTCATCCGTGTCTGGTTTCTTACAATGCACCCAT
CTCTACACCTGCGGCACCTTCGCCTTCAGCCCTGCTTGTACCTTCATTGAACTTCAAGATTCTACCTG
TTGCCATCTCGGAGGACAAGGTCATGGAGGAAAAGGCCAAAGCCCTTTGACCCCGCTCACAAGCAT
ACGGCTGTCTGGTGGATGGGATGCTCTATTCTGGTACTATGAACAACCTCCTGGCAGTGAGCCATC
CTGATGCGCACACTGGGATCCCAGCCTGTCTCAAGACCGACAACCTCCTCCGCTGGCTGCATCATGAC
GCCTCCTTTGTGGCAGCCATCCCTTCGACCCAGGTCGTCTACTTCTTTCGAGGAGACAGCCAGCGAG
TTTGACTTCTTTGAGAGGCTCCACACATCGCGGGTGGCTAGAGTCTGCAAGAATGACGTGGCGGGCGAA
AAGCTGCTGCAGAAGAAGTGGACCACCTTCTGAAGGCCAGCTGCTCTGCACCCAGCCGGGCAGCTG
CCCTTCAACGTATCCGCCACGCGGTCTGCTCCCGCGGATTCTCCACAGCTCCCCACATCTACGCA
GTCTTACCTCCCAGTGGCAGGTTGGCGGGACCAGGAGCTCTGCGGTTTGTGCCTTCTCTCTTGGAC
ATTGAACGTGTCTTAAAGGGAAATACAAAGAGTTGAACAAGAAACTTACGCTGGACTACTTATAGG
GGCCCTGAGACCAACCCCGCCAGGCACTTGTCTCAGTGGGCCCTCCTCTGATAAGGCCCTGACCTTC
ATGAAGGACCATTTCTGATGGATGAGCAAGTGGTGGGACGCCCCTGCTGGTGAATCTGGCGTGGAG
TATACACGGCTTGCACTGGAGACAGCCAGGGCCTTGTGGGACAGCCATCTTGTATGTAACCTGGGA
ACCACCAAGGTCGCTCCACAAGGCTGTGGTAAGTGGGACAGCAGTGCATCTGGTGAAGAGATT
CAGCTGTTCCCTGACCCTGAACCTGTTGCAACCTGCAGCTGGCCCCACCCAGGTTGCAGTGTGTA
GGCTTCTCAGGAGGTGTCTGGAGGTGCCCGAGCCAACGTAGTGTCTATGAGAGCTGTGTGGACTGT
GTCCTTGCCCGGGACCCCACTGTGCCTGGGACCTGAGTCCCGAACCTGTTGCCTCCTGTCTGCCCCC
AACCTGAACTCCTGGAAGCAGGACATGGAGCGGGGAACCCAGAGTGGGCATGTGCCAGTGGCCCCATG
AGCAGGAGCCTTCGGCCTCAGAGCCGCCGAAATCATTAAAGAAGTCTGGCTGTCCCAACTCCATC
CTGGAGCTCCCTGCCCCACCTGTCAGCCTTGGCCTTATTATTGGAGTCATGGCCAGCAGCAGTC
CCAGAAGCCTCTCCACTGTCTACAATGGCTCCCTCTTGTGATAGTGCAGGATGGAGTTGGGGTCTC
TACCAGTGTGGCAACTGAGAATGGCTTTTCATACCCTGTGATCTCCTACTGGGTGGACAGCCAGGAC
CAGACCCTGGCCCTGGATCCTGAACTGGCAGGCATCCCCCGGGAGCATGTGAAGTCCCCTGTGACCAGG
GTCAGTGGTGGGCGCCCTGGCTGCCAGCAGTCTACTGGCCCCACTTTGTCAGTGTCACTGTCTC
TTTGCCTTAGTGCTTTCAGGAGCCCTCATCATCCTCGTGGCCTCCCCATTGAGAGCACTCCGGGCTCGG
GGCAAGGTTTCAGGGCTGTGAGACCCTGCGCCCTGGGGAGAAGGCCCGTTAAGCAGAGAGCAACCTC
CAGTCTCCAAGGAATGCAGGACCTCTGCCAGTGTGGACGCTGACAACAACCTGCCTAGGCACTGAG
GTAGCTTAA
  
```

Restriction Sites: SgfI-MluI

ACCN: NM_001193301

Insert Size: 2286 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_001193301.1](#)

RefSeq Size: 3229 bp

RefSeq ORF: 2286 bp

Locus ID: 64218

UniProt ID: [Q9H3S1](#)

Cytogenetics: 1q22

Protein Families: Transmembrane

Protein Pathways: Axon guidance

MW: 83.6 kDa

Gene Summary: 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]

Transcript Variant: This variant (3) has an alternate 5' UTR, as compared to variant 1. Variants 1-3 encode the same isoform (1).