

Product datasheet for **SC326208**

Semaphorin 4D (SEMA4D) (NM_001142287) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 4D (SEMA4D) (NM_001142287) Human Untagged Clone
Tag:	Tag Free
Symbol:	Semaphorin 4D
Synonyms:	A8; BB18; C9orf164; CD100; coll-4; COLL4; GR3; M-sema-G; SEMA
Vector:	<u>pCMV6 series</u>



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Fully Sequenced ORF: >NCBI ORF sequence for NM_001142287, the custom clone sequence may differ by one or more nucleotides

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ATGAGGATGTGCACCCCCATTAGGGGGCTGCTCATGGCCCTTGCAGTGATGTTGGGACA
GCGATGGCATTTCACCCCATACCCCGGATCACCTGGGAGCACAGAGAGGTGCACCTGGTG
CAGTTTCATGAGCCAGACATCTACAACACTCAGCCTTGCTGCTGAGCGAGGACAAGGAC
ACCTTGTACATAGGTGCCCGGGAGGCGGTCTTCGCTGTGAACGCACTCAACATCTCCGAG
AAGCAGCATGAGGTGATTGGAAGTCTCAGAAGACAAAAAGCAAATGTGCAGAAAAG
GGGAAATCAAAACAGACAGAGTGCCTCAACTACATCCGGGTGCTGCAGCCACTCAGCGCC
ACTTCCCTTTACGTGTGTGGGACCAACGCATTCCAGCCGGCTGTGACCCTGAACTTA
ACATCCTTTAAGTTTCTGGGGAAAAATGAAGATGGCAAAGGAAGATGTCCTTTGACCCA
GCACACAGCTACACATCCGTCATGGTTGATGGAGAAGTTTATTCGGGGACGTCGTATAAT
TTTTTGGGAAGTGAACCCATCATCTCCCGAAATCTTCCACAGTCTCTGAGGACAGAA
TATGCAATCCCTTGGCTGAACGAGCCTAGTTTCGTGTTTGTGACGTGATCCGAAAAAGC
CCAGACAGCCCCGACGGCAGGATGACAGGGTCTACTTCTTTCACGGAGGTGTCTGTG
GAGTATGAGTTTGTGTTCAAGGTGCTGATCCACGGATAGCAAGAGTGTGCAAGGGGGAC
CAGGGCGCCTGAGGACCTTGCAGAAGAAATGGACCTCCTTCTGAAAGCCCGACTCATC
TGCTCCCGGCCAGACAGCGGCTTGGTCTTCAATGTGCTGCGGGATGTCTTCGTGCTCAGG
TCCCCGGGCTGAAGGTGCCTGTGTTCTATGCACTTTCACCCACAGCTGAACAACGTG
GGGCTGTGCGCAGTGTGCGCCTACAACCTGTCCACAGCCGAGGAGGTCTTCTCCACGGG
AAGTACATGCAGAGCACCACAGTGGAGCAGTCCCACACCAAGTGGGTGCGCTATAATGGC
CCGGTACCAAGCCGCGGCTGGAGCGTGCATCGACAGCGAGGCACGGCCGCAACTAC
ACCAGTCTTGAATTTGCCAGACAAGACGCTGCAGTTCGTTAAGACCACCTTTGATG
GATGACTCGTAACCCCAATAGACAACAGGCCAGGTTAATCAAGAAAGATGTGAACACTAC
ACCCAGATCGTGGTGGACCGGACCCAGGCCCTGGATGGGACTGTCTATGATGTCATGTTT
GTCAGCACAGACCGGGAGCTCTGCACAAAGCCATCAGCCTCGAGCACGCTGTTACATC
ATCGAGGAGACCCAGCTTTCAGGACTTTGAGCCAGTCCAGACCCTGTGCTGTCTTCA
AAGAAGGGCAACAGGTTTGTCTATGCTGGCTCTAACTCGGGCGTGGTCCAGGCCCGCTG
GCCTTCTGTGGGAAGCACGGCACCTGCGAGGACTGTGTGCTGGCGGGGACCCCTACTGC
GCCTGGAGCCCCCACAGCGACCTGCGTGGCTCTGCACCAGACCAGAGCCCCAGCAGG
GGTTTGATTGAGGAGATGAGCGCGATGCTTCTGTGTGCCCGCCTCGTCTCCTAAGCCC
CTCCCTCCTCCTGCTCCTTCCCTGTCTGTCTGGCCATGTGGGGACAGGAGGCTT
TCCTCTCCCTGGACCCCTGGCCAGCCTCGGGTGCGGGGCCGACAGCAGCTCGAGGGTC
TCCTTGCTGCCGCCCTTCTGAGTGACCAGGCACAGCACGTGCAGCCCTGGGGAACCTC
TACCTCTTCTGCCAGGCCACAGGTCTTGCAGACATTCGCTTTGTCTGGGAGAAGAATGGG
CGAGCTCTGGAGACCTGTGTCCTGTGCAGACCCATGCACTGCCCGATGGCAGGGCCAT
GCACTCAGCTGGCTGCAGGACGCCATCAGGAAAGCGCTGAGTATCGTCTGTCTCCTC
TCCTCAGCAGGGAACAAGACTTCGAAGGTGCAGGTTGCTGTGATGAGACCTGAAGTGACC
CACCAGGAGAGGTGGACCAGAGAGCTCTCTGCCTGGAGGGCTGTGGCTGGGGAGCACGAC
CGGATGATGCAGAGCTGGAGGAAGCGTGGGAAAGCTGTAGCAAGGACACCCTG

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- Restriction Sites:** Please inquire
- ACCN:** NM_001142287
- 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:	<u>NM_001142287.1, NP_001135759.1</u>
RefSeq Size:	4417 bp
RefSeq ORF:	2217 bp
Locus ID:	10507
UniProt ID:	<u>Q92854</u>
Cytogenetics:	9q22.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Axon guidance
Gene Summary:	<p>Cell surface receptor for PLXNB1 and PLXNB2 that plays an important role in cell-cell signaling (PubMed:20877282). Regulates GABAergic synapse development (By similarity). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner (By similarity). Modulates the complexity and arborization of developing neurites in hippocampal neurons by activating PLXNB1 and interaction with PLXNB1 mediates activation of RHOA (PubMed:19788569). Promotes the migration of cerebellar granule cells (PubMed:16055703). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro) (PubMed:8876214). Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the phosphatidylinositol 3-kinase-AKT pathway (PubMed:16055703). [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 3' UTR and coding sequence compared to variant 1. The resulting isoform (2) has a shorter and distinct C-terminus compared to isoform 1.</p>