

Product datasheet for **MC229062**

Sema4d (NM_001281880) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema4d (NM_001281880) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sema4d
Synonyms:	CD100; coll-4; Semacl2; Semaj; Semcl2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC229062 representing NM_001281880
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGATGTGTGCCCCCGTTAGGGGGCTGTTCTTGGCCCTGGTGGTAGTGTGAGAACC CGGTGGCAT
 TTGCACCTGTGCCTCGGCTCACCTGGAACATGGAGAGGTAGGTCTGGTGCAGTTTCACAAGCCAGGCAT
 CTTAACTACTCGGCCTTCTGTAGTGAAGCAAAAGACTCTGTATGTAGGCCCGCCGGGAAGCAGTC
 TTTGCAGTGAATGCGCTGAACATCTCTGAGAAGCAACATGAGGTATATTGGAAGGTCTCTGAAGACAAAA
 AATCCAAGTGTGCAGAGAAGGGGAAATCAAAGCAGACGGAATGCCTAACTACATTTCGAGTACTACAGCC
 ACTAAGCAGCACTTCCCTCTATGTGTGTGGGACCAATGCGTTCAGCCACCTGTGACCACCTGAACCTG
 ACATCCTCAAGTTTCTGGGAAAAGTGAAGATGGCAAAGGAAGATGCCCTTCGACCCCGCCACAGCT
 ACACATCAGTCATGGTTGGGGCGAGCTCTACTCTGGGACGTCTATAATTTCTGGGCAGTGAACCCAT
 CATCTCTCGAACTTCCACAGTCCCTTGAGGACGGAGTATGCCATCCCGTGGCTGAACGAGCCTAGC
 TTCGTCTTGGTACGTGATCCAGAAAAGCCAGATGGTCCGGAGGGTGAAGATGACAAGGTCTACTTCT
 TTTTTACGGAGGTATCCGTGGAGTACGAATTCGTCTTCAAGTTGATGATCCCGCAGTTGCCAGGGTGTG
 CAAGGGCGACAGGGCGGCTGCGGACTTTGCAAAAAAGTGGACCTCCTTCTAAAGGCCAGGCTGATC
 TGCTCCAAGCCAGACAGTGGCCTGGTCTTCAACATACTTCAGGATGTGTTTGTGCTGAGGGCCCCGGCC
 TCAAGGAGCCTGTGTTCTATGCGGTCTTCAACCCACAGCTGAACAATGTGGGTCTGTGAGCGGTGTGCGC
 CTACACACTGGCCAGGTGGAGGAGTCTTCTCCCGTGGAAAGTACATGCAGAGTCCACAGTGGAGCAG
 TCTCACACCAAGTGGGTGCGCTACAATGGCCAGTGGCCACTCCCGACCTGGAGCGTGTATCGACAGTG
 AGGCCGGGCAGCCAACTACACCAGCTCCTTGAATCTCCAGACAAAACACTGCGAGTTTGTAAAAGACCA
 CCCTTTGATGGATGACTCAGTGACCCCGATAGACAACAGACCCAAAGTGAATCAAAAAAGATGTAACCTAC
 ACCCAGATAGTGGTAGACAGGACCCAGGCCCTGGATGGGACTTTCTACGACGTCTGTTTCATCAGCACAG
 ACCGGGGAGCTCTGCATAAAGCAGTCACTCACAAGAGAGGTGCATGTCATCGAGGAGACCCAACTCTT
 CCGGGACTCTGAACCGTCTAACTCTGCTGCTATCGTCAAAGAAGGGGAGGAAGTTTGTCTATGCAGGC
 TCCAACCTGGAGTGGTCCAAGCGCCCTGGCATTCTGCGAAAAGCACGGTAGCTGTGAAGACTGTGTGT
 TAGCACGGGACCCCTACTGTGCCTGGAGCCAGCCATCAAGGCCGTGTTACCTGCACCAGGAAGAGGC
 CTCCAGCAGGGGTGGATTTCAGGACATGAGCGGTGACACATCCTCATGCCTGGATAAGAGTAAAGAAAGT
 TTCAACCAGCATTTTTCAAGCACGGCGGCACAGCGGAACCAAAATGTTTCCAAAAGTCCAACTAGCCC
 GGGTGGTATGGAAGTCCAGAATGGCGAGTTGAAGGCCGCAAGTCCCAAGTACGGCTTTGTGGGCAGGAA
 GCACCTGCTCATTTCAACCTGTGCGACGGAGACAGCGCGTGTACCAAGTGCCTGTGAGAGGAAAGGGTG
 AGGAATAAAACGGTCTCCAGCTGCTGGCCAAGCACGTTCTGGAAGTGAAGATGGTACCTCGGACCCCC
 CCTCACCTACCTCAGAGGATGCTCAGACAGAAGGTAGTAAGATCACATCCAAAATGCCGGTTGCATCTAC
 CCAGGGTCTCTCCCCTACCCCGCTCTGTGGGCAACCTCCCCAGAGCCGCCACCCTACCTCCCAAG
 TCCTCTCCGGCACATCCTGTGAACCAAGATGGTCAACACGGTCCCCAGCTCCACTCAGAGAAGA
 CGGTGTATCTCAAGTCCAGTGACAACCGCTGCTCATGCTCTCTCTCTTCTTCTTCTTCTTCTTCTTCT
 CTGCCCTTTTCTCAACTGCTACAAGGGTACCTGCCCGACAGTGTAAATTCGGTCCAGCCCTG
 CTGCTTGGAAAGAAAACACCCAAAGTCAAGTCTCTGACCTGGAGCAGAGTGTGAAGGAGACACTGGTTCG
 AGCCTGGGAGCTTCTCCAGCAGAACGGCGACCACCCAAAGCCAGCCCTGGATACGGGCTATGAAACGGA
 GCAGGACACCATCACCAGCAAAGTCCCCACGGATCGTGAGGACTCGAACGGATCGATGAACTCTCTGCC
 CGGGACAAACCGTTTGTGATGCAAGTGTGAAGTGAAGTTTGCAGATTTCGGATGCTGACGGGGATGA

ACGGTACGGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001281880
Insert Size: 2586 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).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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_001281880.1</u> , <u>NP_001268809.1</u>
RefSeq Size:	4555 bp
RefSeq ORF:	2586 bp
Locus ID:	20354
UniProt ID:	<u>O09126</u>
Cytogenetics:	13 A5
Gene Summary:	<p>Cell surface receptor for PLXNB1 and PLXNB2 that plays an important role in cell-cell signaling (By similarity). Regulates GABAergic synapse development (PubMed:23699507, PubMed:29981480). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner (PubMed:23699507, PubMed:29981480). Modulates the complexity and arborization of developing neurites in hippocampal neurons by activating PLXNB1 and interaction with PLXNB1 mediates activation of RHOA (By similarity). Promotes the migration of cerebellar granule cells (PubMed:17554007). Plays a role in the immune system; induces B-cells to aggregate and improves their viability (in vitro) (By similarity). Induces endothelial cell migration through the activation of PTK2B/PYK2, SRC, and the phosphatidylinositol 3-kinase-AKT pathway (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) represents the longer transcript. Variants 1 and 2 both encode the same protein.</p>