

Product datasheet for **MR227571**

Sema4d (NM_013660) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema4d (NM_013660) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema4d
Synonyms:	CD100; coll-4; Semacl2; Semaj; Semcl2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR227571 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGGATGTGTGCCCCCGTTAGGGGGCTGTTCTTGGCCCTGGTGGTAGTGTGAGAACC CGGTGGCAT
 TTGCACCTGTGCCTCGGCTCACCTGGAACATGGAGAGGTAGGTCTGGTGCAGTTTCACAAGCCAGGCAT
 CTTAACTACTCGCCTTCTGTAGTGAAGCAAAAGACTCTGTATGTAGGCGCCGGGAAGCAGTC
 TTTGCAGTGAATGCGCTGAACATCTCTGAGAAGCAACATGAGGTATATTGGAAGTCTCTGAAGACAAA
 AATCCAAGTGTGCAGAGAAGGGGAAATCAAAGCAGACGGAATGCCTAACTACATTTCGAGTACTACAGCC
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 ACACATCAGTCATGGTTGGGGCGAGCTCTACTCTGGGACGTCTATAATTTCTGGGCAGTGAACCCAT
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Protein Sequence:

>MR227571 protein sequence
 Red=Cloning site Green=Tags(s)

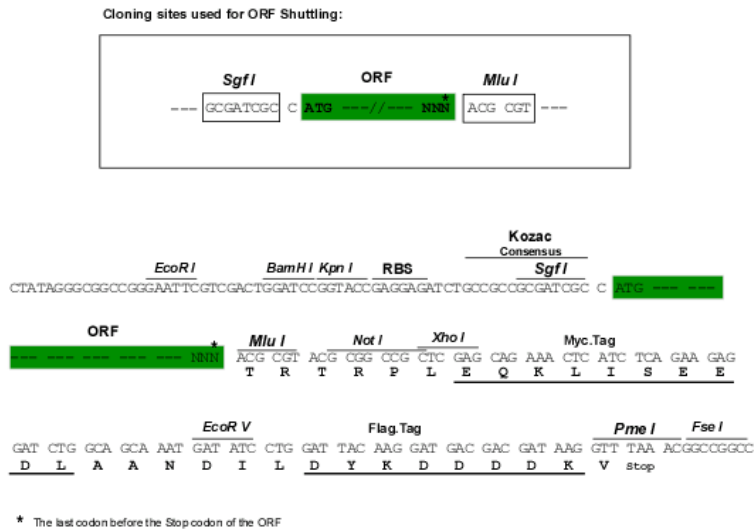
M R M C A P V R G L F L A L V V V L R T A V A F A P V P R L T W E H G E V G L V Q F H K P G I F N Y S A L L M S E D K D T L Y V G A R E A V
 F A V N A L N I S E K Q H E V Y W K V S E D K K S K C A E K G K S K Q T E C L N Y I R V L Q P L S S T S L Y V C G T N A F Q P T C D H L N L
 T S F K F L G K S E D G K G R C P F D P A H S Y T S V M V G G E L Y S G T S Y N F L G S E P I I S R N S S H S P L R T E Y A I P W L N E P S
 F V F A D V I Q K S P D G P E G E D D K V Y F F T E V S V E Y E F V F K L M I P R V A R V C K G D Q G L R T L Q K K W T S F L K A R L I
 C S K P D S G L V F N I L Q D V F L R A P G L K E P V F Y A V F T P Q L N N V G L S A V C A Y T L A T V E A V F S R G K Y M Q S A T V E Q
 S H T K W R Y N G P V P T P R P G A C I D S E A R A A N Y T S S L N L P D K T L Q F V K D H P L M D D S V T P I D N R P K L I K K D V N Y
 T Q I V V D R T Q A L D G T F Y D V M F I S T D R G A L H K A V I L T K E V H V I E E T Q L F R D S E P V L T L L L S S K K G R K F Y Y A G
 S N S G V V Q A P L A F C E K H G S C E D C V L A R D P Y C A W S P A I K A C V T L H Q E E A S S R G W I Q D M S G D T S S C L D K S K E S
 F N Q H F F K H G G T A E L K C F Q K S N L A R V V W K F Q N G E L K A A S P K Y G F V G R K H L L I F N L S D G S G V Y Q C L S E E R V
 R N K T V S Q L L A K H V L E V K M V P R T P P S P T S E D A Q T E G S K I T S K M P V A S T Q G S S P T P A L W A T S P R A A T L P P K
 S S G T S C E P K M V I N T V P Q L H S E K T V Y L K S D N R L L M S L L L F I F V L F L C L F S Y N C Y K G Y L P G Q C L K F R S A L
 L L G K K T P K S D F S D L E Q S V K E T L V E P G S F S Q Q N G D H P K P A L D T G Y E T E Q D T I T S K V P T D R E D S Q R I D E L S A
 R D K P F D V K C E L K F A D S D A D G D

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

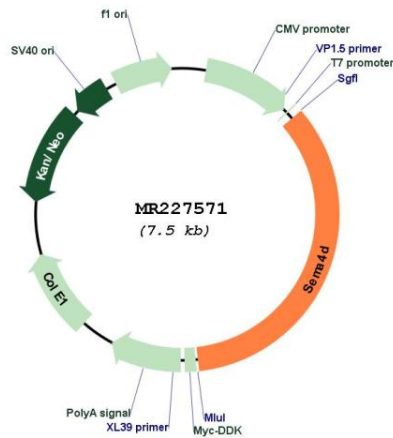


ACCN:	NM_013660
ORF Size:	2586 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<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_013660.5
RefSeq Size:	4491 bp
RefSeq ORF:	2586 bp
Locus ID:	20354
UniProt ID:	O09126
Cytogenetics:	13 A5
MW:	95.6 kDa

Gene Summary:

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]

Product images:



Circular map for MR227571