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Product datasheet for MR211486

Sema6a (NM_018744) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema6a (NM_018744) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema6a
Synonyms:	A730020P05Rik; AI851735; Sema6A-1; Semaq; Vla
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR211486 representing NM_018744
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGGCCAGCAGCCTTACTGCTGTGTCTCACACTGCTACACTGCGCTGGGGCTGGTTTCCCAGAAGATT
CCGAGCCAATCAGTATTTCGCATGGCAACTATACAAAACAGTATCCGGTGTTTGTGGGCCACAAGCCAGG
ACGGAACACCACGCAGAGGCACAGGCTGGACATCCAGATGATCATGATCATGAACAGAACCCTCTACGTT
GCTGCTCGAGACCATATTTATACTGTTGATATAGACACATCCCACACAGAAGAAATTTACTGTAGCAAAA
AACTGACATGGAAATCTAGACAGGCTGACGTAGACACATGCAGGATGAAGGGGAAACATAAGGATGAATG
TCACAACTTCATTAAAGTTCTTCTCAAGAAGAATGATGATACGCTGTTTGTCTGTGGAACCAATGCCTTC
AACCCTTCCTGCAGAAACTACAGGGTCGATACCTTGGAAACTTTTGGGGATGAATTTAGCGGAATGGCCA
GATGCCCTTATGATGCCAAACATGCCAACATCGCTCTGTTTGCAGATGGAAAACTCTACTCGGCTACAGT
GACTGACTTTCTGGCCATTGATGCAGTCATTTACAGGAGCCTCGGAGACAGCCCTACCCTCAGGACTGTC
AAGCATGATTCAAAGTGGTTGAAAGAGCCGTACTTTGTCCAAGCCGTGGATTATGGGGACTATATCTACT
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TCTACCTGGACACCCGTTCCAGACGAACGAGTCCCTAAGCCCAGGCCAGGCTGTTGTGCTGGATCATCCT
CTTTAGAAAAATATGCAACCTCCAATGAGTTTCCCGATGATACCCTGAACTTCATTAAGACGCATCCACT
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GGAGATGAATGTTTACAACCCAGAAAAGTGCAGCTATGATGGTGTAGAAGACAAAAGGATCATGGGCATG

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CAGCTCGACAGAGCGAGTGGCTCACTCTATGTTGCATTCTCTACTTGTGTGATCAAGGTGCCTCTTGGCC
GCTGTGAGCGACATGGGAAGTGTAAAAAAACCTGCATCGCCTCCAGAGACCCGTATTGTGGGTGGGTAAG
GGAAAGTGGTTCCTGTGCCCATCTGTCACCCCTTAGCAGACTGACATTTGAGCAGGACATTGAGCGTGGC
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GCATCACCTAGACCTCACCGCCCTGCCCACCCCAGAGTCCACCCCGACACTGCAGCAGAAACGGAAACCC
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TGGGTTCCCCTGTGATTCCCACGGACCTGCCCCTCCGGGCCTCCCCAAGCCACATCCCCAGCGTGGTGGT
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GTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCTAAAGTTCCACAGCGCGAGGC
CTCCCTAGGTCCCCCGGGAACCTCACTGTCACAGACCGGCCTGAGCAAGAGGCTGGAGATGCAACACTCC
TCCTCCTATGGGCTCGAATATAAGAGGAGCTACCCCACGAACTCGCTCACAAGAAGCCACCAGACCACCA
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CCCCCTCGCTAAAGCCAGATGTACCCCCCAAACCTTCCTTTGCTCCCCTTTCCACATCCATGAAGCCCAA
TGATGCATGTACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211486 representing NM_018744
Red=Cloning site Green=Tags(s)

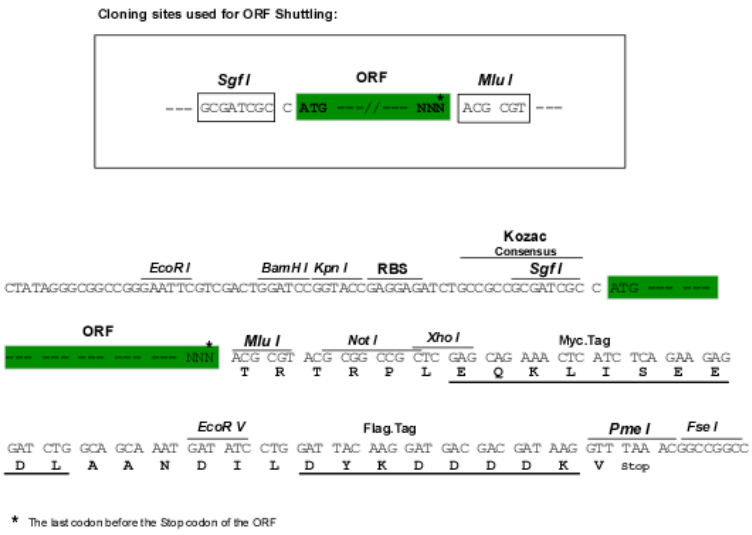
MRPAALLLCLTLLHCAGAGFPEDSEPISISHGNYTKQYPVFVGHKPGRNTTQRHRLDIQMIMIMNRTLYV
AARDHIYTVDIDTSHTEEIYCSKKLTWKSRQADVDTCRMKGKHKDECHNFIKVLLKKNDDTLFVCGTNAF
NPSCRNYRVDTLETFGDEFSGMARCPYDAKHANIALFADGKLYSATVTDFLAIDAVIYRSLGDSPTLRTV
KHDSKWLKEPYFVQAVDYGDYIYFFFREIAVEYNTMGKVVFPRVAQVCKNDMGGSQRVLEKQWTSFLKAR
LNCSVPGDSHFYFNILQAVTDVIRINGRDVVLATFSTPYNSIPGSAVCAYDMLDIANVFTGRFKEQKSPD
STWTPVPDERVPKPRPGCCAGSSSLEKYATSNEFPDDTLNFIKTHPLMDEAVPSIINRPWFLRTMVRYRL
TKIAVDNAAGPYQNHTVVFLGSEKGIILKFLARIGSSGFLNGSLFLEEMNVYNPEKCSYDGVEDKRIMGM
QLDRASGSLYVAFSTCVIKVPLGRCERHGKCKKTCIASRDPYCGWVRESGSCAHLSPLSRLTFEQDIERG
NTDGLGDCHNSFVALNGHASSLYPSTTTSDSASRDGYESRGGMLDWNDLLEAPGSTDPLGAVSSHNHQDK
KGVIRESYLKSNDQLVPVTLLAIAVILAFVMGAVFSGIIVYCVCDHRRKDVAVVQRKEKELTHSRRGSMS
SVTKLSGLFGDTQSKDPKPEAILTPLMHNGKLATPSNTAKMLIKADQHHLDLTALPTPESTPTLQQKRKP
NRGSREWERNQNIINACTKDMPPMGSPVIPTDLPLRASPSHIPSVVVLPITQQGYQHEYVDQPKMSEVVA
QMALEDQAATLEYKTIKEHLSSKSPNHGVNLVENLDSLPPKVPQREASLGPPGTSLSQTGLSKRLEMQHS
SSYGLEYKRSYPTNSLTRSHQTTTLKRNNTNSSNSSHLSRNQSFGRGDNPPPAPQRVDSIQVHSSQPSGQ
AVTVSRQPSLNAYNSLTRSGLKRTPSLKPDVPPKPSFAPLSTSMKPNDACT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2674_b01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018744

ORF Size: 3096 bp

OTI Disclaimer: 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.

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

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:
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_018744.2, NP_061214.2

RefSeq Size: 6901 bp

RefSeq ORF: 3096 bp

Locus ID: 20358

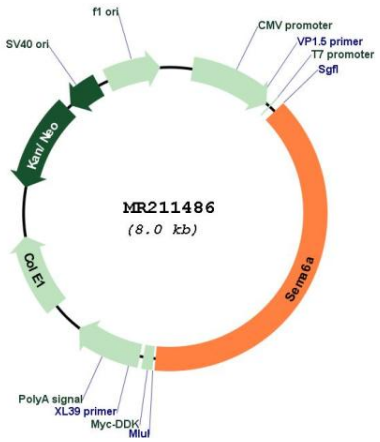
UniProt ID: O35464

Cytogenetics: 18 C

MW: 114.4 kDa

Gene Summary: Cell surface receptor for PLXNA2 that plays an important role in cell-cell signaling. Required for normal granule cell migration in the developing cerebellum. Promotes reorganization of the actin cytoskeleton and plays an important role in axon guidance in the developing central nervous system. Can act as repulsive axon guidance cue. Has repulsive action towards migrating granular neurons. May play a role in channeling sympathetic axons into the sympathetic chains and controlling the temporal sequence of sympathetic target innervation. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211486