

Product datasheet for MC223265

Sema6a (NM_018744) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema6a (NM_018744) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sema6a
Synonyms:	A730020P05Rik; AI851735; Sema6A-1; Semaq; Vla
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223265 representing NM_018744 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGGCCAGCAGCCTTACTGCTGTGTCTCACACTGCTACACTGCGCTGGGGCTGGTTTCCAGAAGATT
CCGAGCCAATCAGTATTTTCGCATGGCAACTATACAAAACAGTATCCGGTGTGGGGCCACAAGCCAGG
ACGGAACACCACGCAGAGGCACAGGCTGGACATCCAGATGATCATGATCATGAACAGAACCCTCTACGTT
GCTGCTCGAGACCATATTTATACTGTTGATATAGACACATCCCACACAGAAGAAATTTACTGTAGCAAAA
AACTGACATGAAATCTAGACAGGCTGACGTAGACACATGCAGGATGAAGGGGAAACATAAGGATGAATG
TCACAACTTCATTAAAGTTCTTCTCAAGAAGAATGATGATACGCTGTTTGTCTGTGGAACCAATGCCTTC
AACCTTCTCTGCAGAAACTACAGGGTCGATACCTTGAAAACCTTTTGGGGATGAATTTAGCGGAATGGCCA
GATGCCCTTATGATGCCAAACATGCCAACATCGCTCTGTTTGCAGATGGAAAACCTACTCGGCTACAGT
GACTGACTTTCTGGCCATTGATGCAGTCATTTACAGGAGCCTCGGAGACAGCCCTACCCTCAGGACTGTC
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TCTTCTCAGAGAAATTCAGTAGAATAACAACACTATGGGAAGGTTGTTTTCCCTAGGGTGGCTCAGGT
CTGTAAGAATGACATGGGAGGCTCAGAGAGTCTGGAGAAGCAGTGGACATCTTCTGAAGGCTCGC
CTGAACCTGCTCGGTGCCGAGACTCTCATTTTTATTTCAATATACTCCAGGCAGTTACAGATGTGATTC
GCATTAATGGCCGTGATGTTGTCTTGGCAACCTTTCCACACCTTATAACAGCATCCAGGTTCTGCAGT
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TCTACCTGGACACCCGTTCCAGACGAACGAGTCCCTAAGCCAGGCCAGGCTGTTGTGCTGGATCATCCT
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CATGGACGAGGCAGTGCCTTCCATCATCAACAGACCTTGGTTCTGAGAACAAATGGTCAGATACCGCCTG
ACCAAAATTCAGTAGACAACGCTGCCGGCCATATCAGAATCACACTGTGGTTTTCTGGGATCAGAAA
AGGAATCATCCTGAAGTCTTGGCCAGGATAGGAAGCAGTGGTTTCTAAATGGCAGCCTTTCTGGA
GGAGATGAATGTTTACAACCCAGAAAAGTGCAGCTATGATGGTGTAGAAGACAAAAGGATCATGGGCATG



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CAGCTCGACAGAGCGAGTGGCTCACTCTATGTTGCATTCTCTACTTGTGTGATCAAGGTGCCTCTTGGCC
GCTGTGAGCGACATGGGAAGTGTAAAAAACCTGCATCGCCTCCAGAGACCCGATTGTGGGTGGGTAAG
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CAGTCATTCTGGCTTTTGTGCATGGGGGCCGTCTTCTCGGGCATCATCGTGTATTGTGTGCGATCACCG
GCGCAAAGACGTGGCAGTAGTGCAGCGCAAGGAGAAAGAGCTCACTCACTCGCGTCGGGGATCTATGAGC
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CACCACACTATGCACAACGGCAAGCTGGCCACGCCATAGCAACACCGCCAAGATGCTCATCAAGGCTGACCA
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AACCGCGCAGTCGCGAGTGGGAGGAACCAGAACATCATCAATGCCTGCACCAAGGACATGCCTCCCA
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CCTGCCATCACGCAGCAGGGCTACCAGCACGAGTACGTAGATCAGCCAAAATGAGCGAGGTGGTGGCT
CAGATGGCACTGGAGGACCAGGCTGCCACCTGGAGTATAAGACCATCAAAGAGCACCTGAGTAGCAAGA
GTCCCAACCATGGGGTGAACCTTGTGGAGAACCTGGACAGCCTGCCCCCTAAAGTTCCACAGCGCGAGGC
CTCCCTAGGTCCCCGGGAACCTCACTGTACAGACCGGCCTGAGCAAGAGGCTGGAGATGCAACACTCC
TCCTCCTATGGGCTCGAATATAAGAGGAGCTACCCACGAACTCGCTCACAAGAAGCCACCAGACCACCA
CTCTCAAAGAACAATACTAATCCTCCAATTCCTCCACCTCTCCAGGAACCAGAGCTTTGGCCGGGG
AGACAACCCACCCCGCCCGCAGCGGGTGGACTCTATCCAGGTGCACAGCTCCAGCCCTCTGGCCAG
GCCGTGACTGTTTCGAGGCAGCCAGCCTCAATGCCTACAACACTACTGACGAGGTGGGGCTGAAGCGCA
CCCCCTCGCTAAAGCCAGATGTACCCCCAAACCTTCTTTGCTCCCTTCCACATCCATGAAGCCCAA
TGATGCATGTACATAA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
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Chromatograms: https://cdn.origene.com/chromatograms/ja2018_g07.zip

Restriction Sites: SgfI-MluI

ACCN: NM_018744

Insert 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](#)

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

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]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).