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Product datasheet for MR231120

Sema3a (NM_001243073) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema3a (NM_001243073) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sema3a
Synonyms:	coll-1; Hsema-I; SEMA1; Semad; SemD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR231120 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCTGGTTCACTGGGATTGCCTGTCTTTTCTGGGGTGTATTACTTACAGCCAGAGCAAACTATGCAA
ACGGAAAGAACAATGTGCCAAGACTGAAATTATCGTACAAAGAAATGTTGGAATCCAACAATGTGATCAC
TTTTAATGGCTTGGCCAACAGCTCCAGTTACCACACCTTCCTTCTGGATGAAGAACGGAGTAGACTATAT
GTTGGAGCAAAAGATCATATATTTTCATTCAACTTGGTGAACATTAAAGATTTTCAAAAGATTGTGTGGC
CAGTATCTTACACAAGGAGAGATGAATGCAAATGGGCTGGAAAAGATATCCTGAAAGAATGTGCCAATTT
CATCAAGGTCCTGGAGGCTTATAATCAGACTCACTTGTATGCCTGTGGAACTGGGGCTTTCCATCCAATC
TGCACCTATATTGAAGTTGGACATCATCCTGAGGACAACATTTTTAAGCTGCAGGACTCACATTTTGAAA
ACGGTCGTGGGAAGAGCCCTTATGATCCCAAACTACTGACTGCCTCTCTTCTAATAGACGGTGAGTTGTA
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AGAGTGACAACCCTGAAGATGACAAAGTATATTTTTTCTTCCGAGAAAATGCAATAGACGGAGAACACTC
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GTTCACAACATCAAGCAACATCTTTAAGGGATCTGCTGTGTGCATGTACAGCATGAGTGATGTAAGAAGG
GTGTTCCTTGGTCCATATGCTCACAGAGATGGTCCCAACTATCAGTGGGTGCCTTACCAAGGAAGAGTCC
CTTATCCACGGCCAGGAACTTGTCCCAGTAAAACATTTGGCGGATTTGACTCCACAAAGGACCTTCCTGA
TGATGTCATAACTTTTGCAAGAAGTCATCCAGCCATGTACAACCCAGTGTTTCCTATAAATAATCGCCCG
ATCATGATCAAAACAGATGTAAATTATCAGTTCACACAAATTGTTGTAGACCGAGTGGATGCAGAAGATG
GCCAGTATGATGTTATGTTCATCGGAACAGATGTTGGAACCGTTCTTAAAGTGGTTTCAGTCCCCAAGGA
GACTTGGCATGACCTAGAAGAAGTTCTTCTGGAAGAAATGACCGTCTTCCGGGAACCAACAACTATTTCG
GCAATGGAGCTTTCTACTAAACAGCAACAGCTGTACATTGGCTCAACTGCGGGAGTGGCACAGCTTCCTC
TACACCGCTGTGACATCTATGGCAAAGCCTGTGCAGAATGCTGCCTCGCTCGGGACCCTTACTGTGCCTG
GGATGGGTCCTCATGCTCACGCTATTTTCCTACTGCAAAGAGGCGCACAAGACGACAAGATATAAGGAAT
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AACACGGATTCATGCAAACTCTTCTTAAGGTAACCCTGGAAGTCATTGACACAGAACATTTGGAAGAACT
TCTTCATAAAGATGACGATGGAGATGGCTCTAAGATAAAAGAAATGTCGAGCAGCATGACGCCCAGCCAG
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AACAAGTGTGGAAAAGGGACCGAAAGCAACGCCGACAAAGGCCGGGGCACTCTCAAGGGAGCAGCAACAA
GTGGAAGCACATGCAAGAGAGCAAGAAAGGTAGAAACAGGAGGACCCACGAGTTTGAGCGGGCACCCAGA
AGTGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

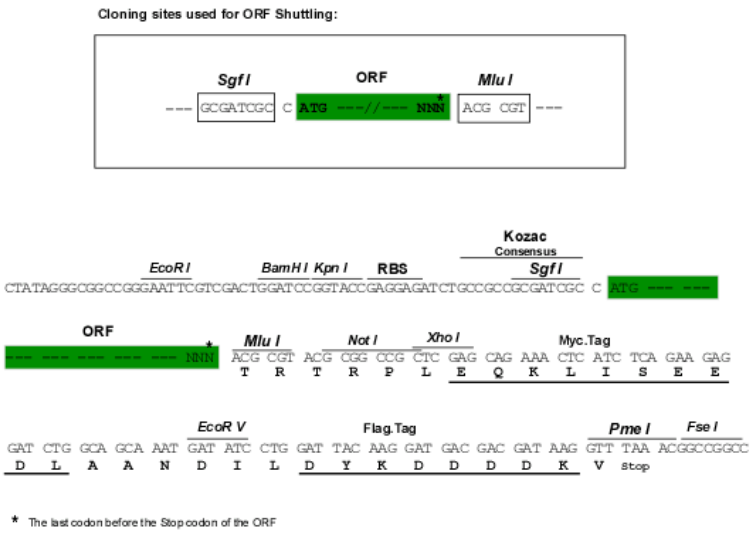
>MR231120 protein sequence
Red=Cloning site Green=Tags(s)

MGWFTGIACLFWGVLLTARANYANGKNNVPRLKLSYKEMLESNNVITFNGLANSSSYHTFLLDEERSRLY
VGAKDHIFSFNLVNIKDFQKIVWPVSYTRRDECKWAGKDILKECANFIKVLEAYNQTHLYACGTGAFHPI
CTYIEVGHHPEDNIFKLQDSHFENGRGKSPYDPKLLTASLLIDGELYSGTAADFMGRDFAIFRTLGHHHP
IRTEQHDSRWLNDPRFISAHLIPESDNPEDDKVYFFFRENAIDGEHSGKATHARIGQICKNDFGGHRSLV
NKWTTFLKARLICSVPGPNGIDTHFDELQDVFLMNSKDPKNPIVYGVFTTSSNIFKGSAVCMYSMSDVRR
VFLGPYAHRDGPNYQWVPYQGRVPYPRPGTCPSKTFGGFDSTKDLPDDVITFARSHPAMYNPVFPINNRP
IMIKTDVNYQFTQIVVDRVDAEDGQYDVMFIGTDVGTVLKVVSVPKETWHDLEEVLLEEMTVFREPTTIS
AMELSTKQQQLYIGSTAGVAQLPLHRCDIYGKACAECCLARDPYCAWDGSSCSRYFPTAKRRTRRQDIRN
GDPLTHCSDLQHHDNHHGPSLEERIIYGVENSSTFLECSPKSQRALVYWQFQRRNEDRKEEIRMGDHIIR
TEQGLLLRSLQKKDSGNYLCHAVEHGFMQTLLKVTLEVIDTEHLEELLHKDDDGDGSKIKEMSSSMTPSQ
KVWYRDFMQLINHPNLNTMDEFCEQVWKRDRKQRRQRPGHSQGSSNKWKHMQESKKGRNRRTHEFERAPR
SV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_001243073
ORF Size:	2316 bp
OTI Disclaimer:	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_001243073.1, NP_001230002.1

RefSeq Size: 6422 bp

RefSeq ORF: 2319 bp

Locus ID: 20346

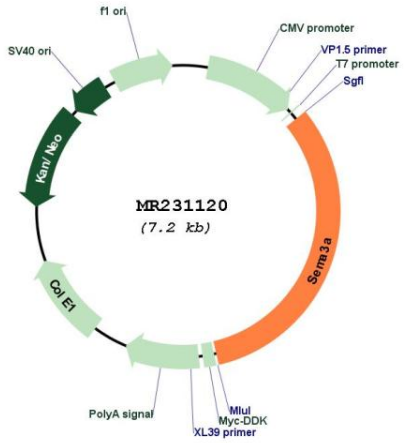
UniProt ID: O08665

Cytogenetics: 5 A1

MW: 88.8 kDa

Gene Summary: Plays a role in growth cones guidance. May function to pattern sensory projections by selectively repelling axons that normally terminate dorsally. Involved in the development of the olfactory system and in neuronal control of puberty (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR231120