

Product datasheet for **MG209876**

Sema7a (NM_011352) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema7a (NM_011352) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sema7a
Synonyms:	2900057C09Rik; CDw108; H-Sema-L; M-Sema-L; Semal
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>MG209876 representing NM_011352
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACGCCTCCTCCTCCCGACGTGCCGCCCCAGCGCACCGCGCCCGCGTCTCAGCCTGCCGGCTC
 GGTTCCGGCTCCCGCTGCGGCTGCGGCTTCTGCTGGTGTCTGGGTGGCCGCCCTCCGCCAAGGCCA
 CTCGAGGAGCGGACCCCGCATCTCCGCCGTCTGGAAAGGCGAGGACCATGTGGACTTTAGCCAGCCTGAG
 CCACACACCGTGCTTTTCCATGAGCCGGGCAGCTTCTCTGTCTGGGTGGGTGGACGTGGCAAGGTCTACC
 ACTTCAACTTCCCGAGGGCAAGAATGCCTCTGTGCGCACGGTGAACATCGGCTCCACAAAGGGTCTGT
 TCAGGACAAACAGGACTGTGGGAATTACATCACTCTTCTAGAAAGGCGGGGAATGGGCTGCTGGTCTGT
 GGCACCAATGCCCGAAGCCAGCTGCTGGAATTGGTGAATGACAGTGTGGTGTACTTGGTGTGAG
 TGAAAGGCTATGCCCCCTCAGCCCGGATGAGAACTCCCTGGTTCTGTTGAAGGAGATGAAGTGTACTC
 TACCATCCGGAAGCAGGAATACAACGGGAAGATCCCTCGTTCGACGCATTCGGGGCGAGAGTGAAGTGT
 TACACAAGTGATACAGTCATGCAGAACCACAGTTCATCAAGGCCACCATTGTGCACCAAGCAAGCCCT
 ATGATGATAAGATCTACTACTTCTCCGAGAAGACAACCCGTGACAAGAACCCCGAGGCTCCTCTCAATGT
 GTCCCGAGTAGCCAGTTGTGCAGGGGGGACCAGGGTGGTGTGAGAGTTCGTTGTCTGTCTCCAAGTGGAA
 ACCTTCTGAAAGCCATGTTGGTCTGCAGCGATGCAGCCACCAACAGGAACCTTCAATCGGCTGCAAGATG
 TCTTCTGCTCCCTGACCCAGTGGCCAGTGGAGAGATACCAGGGTCTATGGCGTTTTCTCCAACCCCTG
 GAACTACTCAGCTGTCTGCGTGTATTGCTTGGTACATTGACAGAGTCTCCGTACCTCATCGCTCAA
 GGCTACCACATGGGCCTTCCAACCCCTGACCTGGCATGTGCCTCCAAAAAAGCAGCCCATACCCACAG
 AAACCTCCAGGTAGCTGATAGTCACCCAGAGGTGGCTCAGAGGGTGGAACTATGGGGCCACTGAAGAC
 ACCATTGTTCCATTCTAAGTACCATTACCAGAAAAGTGGTTCGTTACCCGCATGCAAGCCAGCAATGGAGAG
 ACCTTCCATGTGCTTTATCTAACACAGACAGGGGCACCATTACAAGGTGGTGGAAATCAGGGGACCAGG
 ACCATAGCTTTGTCTTCAATATCATGGAGATCCAGCCCTTTCACCGTGCAGCGGCCATCCAGGCTATATC
 ATTGGATGCTGACCGGCGGAAGCTCTATGTGACCTCCAGTGGGAAGTGTGAGCCAGGTACCCTGGACATG
 TGTGAGGTCTACAGCGGGGGCTGCCATGGCTGCCTCATGTCCCGAGACCCTACTGTGGCTGGGACCAGG
 ACCGCTGCGTGTCTATCTACAGCTCCCAACGATCAGTGTGCAGTCCATTAATCCAGCGGAGCCACACAG
 AGAGTGTCCCAACCTAAACCAGACGAGGCTCCATTGCAGAAGGTTTCCCTGGCTCGGAACCTCTCGATAC
 TACCTGACCTGCCCCATGGAGTCCCGCCACGCCACTTACTTATGGCGCCATGAGGAGAATGTGGAACAGA
 GCTGTGAGCCAGGCCACCAAGCCCTAGCTGCATCCTGTTCAATTGAGAACCTCACGGCCCGTCAGTATGG
 CCACTACCGCTGCGAGGCCAAGAGGGCTCCTACCTCCGTGAGGCTCAACACTGGGAGCTGCTGCCAGAG
 GACAGAGCACTGGCCGAACAATAATGGGCCATGCCCGGGCCCTGGCCGCTCCTTCTGGCTGGGGGTCC
 TGCCACACTCATACTTGGTCTGCTGGTTCAC

ACCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG209876 representing NM_011352
 Red=Cloning site Green=Tags(s)

MTPPPPGRAAPSAPRARVLSLPAFGLPLRLRLLLVFWVAAASAQGHRSRSGPRISAVWKGQDHDVDFSQPE
 PHTVLFHEPGSFVWVGGGRGKVYHFNFPEGKNASVRTVNIIGSTKGCQDKQDCGNYITLLERRGNGLLVC
 GTNARKPSCWNLVNDSSVMSLGMKGYAPFSPDENSLVLFEGDEVYSTIRKQEYNGKIPRFRIRGESEL
 YTSDTVMQNPQFIKATIVHQDQAYDDKIYYFFREDNPKNPEAPLNVSRVAQLCRGDQGGESSLSVSKWN
 TFLKAMLVCSDAATNRNFRNLQDVFLLPDPSGQWRDTRVYGVFVSNPWNYSAVCVYSLGDIDRVFRTSSLK
 GYHMGLPNPRPGMCLPKKQPIPTETTFQVADSHPEVAQRVEPMGLKTPLFHSKYHYQKVVVHRMQASNGE
 TFHVLVLTDRGTIHKVVESGDQDHSFVFNIMEIQPFHRAAAIQAIQLDADRRKLYVTSQWEVSQVPLDM
 CEVYSGGCHGCLMSRDPYCGWDQDRCVSIYSSQRSVLQSIINPAEPHRECPNPKPDEAPLQKVSLARNSRY
 YLTCPMESRHATYLWRHEENVEQSCEPGHQSPSCILFIENLTARQYGHYRCEAQEGSYLREAQHWELLPE
 DRALAEQLMGHARALAAFWLGVLP TLLGLLVH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_011352

ORF Size: 1992 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_011352.3](#)

RefSeq Size: 3290 bp

RefSeq ORF: 1995 bp

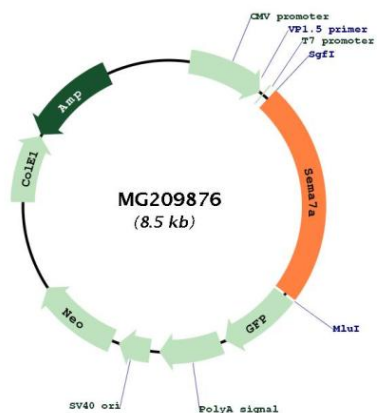
Locus ID: 20361

UniProt ID: [Q9QUR8](#)

Cytogenetics: 9 B

Gene Summary: Plays an important role in integrin-mediated signaling and functions both in regulating cell migration and immune responses. Promotes formation of focal adhesion complexes, activation of the protein kinase PTK2/FAK1 and subsequent phosphorylation of MAPK1 and MAPK3. Promotes production of proinflammatory cytokines by monocytes and macrophages. Plays an important role in modulating inflammation and T-cell-mediated immune responses. Promotes axon growth in the embryonic olfactory bulb. Promotes attachment, spreading and dendrite outgrowth in melanocytes.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG209876