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Product datasheet for MG216372

Sema4a (NM_001163490) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sema4a (NM_001163490) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sema4a
Synonyms:	AI132332; Semab; SemB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG216372 representing NM_001163490
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCCTACCATCCCTGGGCCAGGACTCATGGAGTCTCCTGCGTGTTTTTTTCTTCCAACTCTTCCTGC
TGCCATCACTGCCACCTGCTTCTGGGACTGGTGGTCAGGGGCCCATGCCCAGAGTCAAATACCATGCTGG
AGACGGGCACAGGGCCCTCAGCTTCTTCCAACAAAAAGGCCTCCGAGACTTTGACACGCTGCTCCTGAGT
GACGATGGCAACACTCTCTATGTGGGGGCTCGAGAGGCCGTCCTGGCCTTGAATATCCAGAACCCAGGAA
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CTTGGTCGATGGGATGCTTTATTCCGGCACCATGAACAACTTCCTGGGCAGCGAGCCCATCCTGATGCGG
ACACTGGGATCCCAGCCTGTTCTCAAGACTGACATCTTCTTACGCTGGCTGCACGCGGATGCCTCCTTCG
TGGCAGCCATTCCATCCACCCAGGTCGTCTATTTCTTCTTTGAGGAGACAGCCAGCGAGTTTGACTTCTT
TGAAGAGCTGTATATATCCAGGGTGGCTCAAGTCTGCAAGAACGACGTGGGCGGTGAAAAGCTGCTGCAG
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CCTCAACTAATTAAAGAAGTCCTGACAGTCCCCAACTCCATCCTGGAGCTGCCCTGCCCCCACCTGTCAG
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TCATACCCTGTGGTCTCCTATTGGGTAGACAGCCAGGACCAGCCCCTGGCGCTGGACCCTGAGCTGGCGG
GCGTTCCCCGTGAGCGTGTGCAGGTCCCGCTGACCAGGGTCGGAGGCGGAGCTTCCATGGCTGCCCAGCG
GTCCTACTGGCCCCATTTTCTCATCGTTACCGTCCTCCTGGCCATCGTGCTCCTGGGAGTGCTCACTCTC
CTCCTCGCTTCCCCACTGGGGGCGCTGCGGGCTCGGGGTAAGGTTCAGGGCTGTGGGATGCTGCCCCCCA
GGGGAAAGGCTCCACTGAGCAGGGACCAGCACCTCCAGCCCTCCAAGGACCACAGGACCTCTGCCAGTGA
CGTAGATGCCGACAACAACCATCTGGGCGCCGAAGTGGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

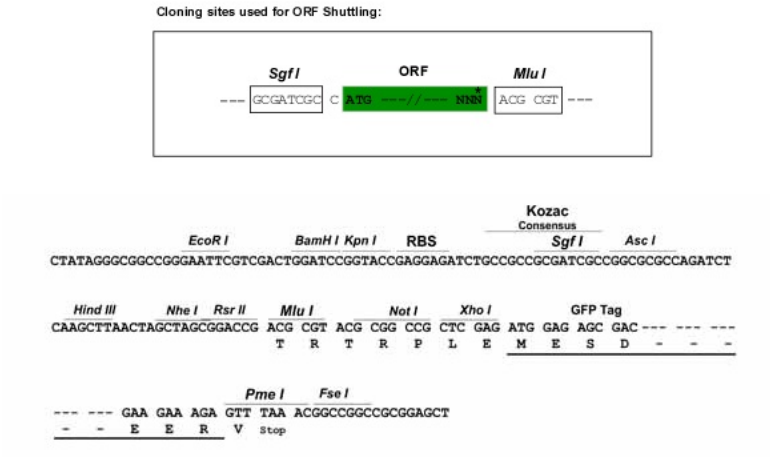
>MG216372 representing NM_001163490
Red=Cloning site Green=Tags(s)

MALPSLGQDSWSLLRVFFFQLFLLPSLPPASGTGGQGPMPRVKYHAGDGHRALSFFQQKGLRDFDTLLLS
DDGNTLYVGAREAVLALNIQNPGIPRLKNMIPWPASERKKTECAFKKKSNETQCFNFIRVLVSYNATHLY
ACGTFAFSPACTFIELQDSLLLPILIDKVMDGKGQSPFDPVHKHTAVLVDGMLYSGTMNNFLGSEPILMR
TLGSQPVLKTDIFLRWLHADASFVAAIPSTQVVYFFFEETASEFDFFEELYISRVAQVCKNDVGGEKLLQ
KKWTTFLKAQLLCAQPGQLPFNIIRHAVLLPADSPSVSRIYAVFTSQWQVGGTRSSAVCAFSLTDIERVF
KGKYKELNKETSRWTTYRGSEVSPRPGSCSMGPSSDKALTFMKDHFLMDEHVVGTPLLVKSGVEYTRLAV
ESARGLDGSSHVVMYLGTSTGSLHKAVVPQDSSAYLVEEIQLSPDSEPVRNLQLAPAQGAVFAGFSGGIW
RVPRANCSVYESCVDCVLARDPHCAWDPESRLCSLLSGSTKPWKQDMERGNPEWVCTRGPMARSPRRQSP
PQLIKEVLTVPNSILELPCPHLSALASYHWSHGRAKISEASATVYNGSLLLLPQDGVGGLYQCVATENGY
SYPVVSYWVDSQDQPLALDPELAGVPRERVQVPLTRVGGGASMAAQRSYWPHFLIVTVLLAIVLLGVLTL
LLASPLGALRARGKVQGCGMLPPRGKAPLSRDQHLQPSKDHRTSASDVDADNNHLGAEVA

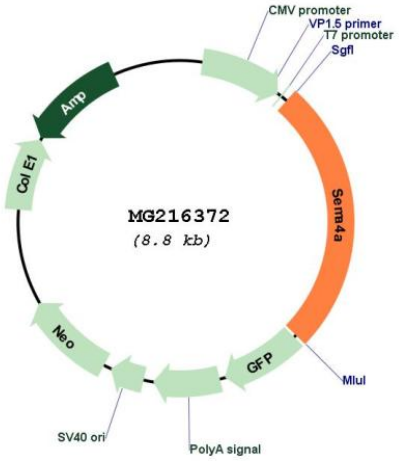
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001163490
ORF Size:	2280 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_001163490.1, NP_001156962.1
RefSeq Size:	3125 bp
RefSeq ORF:	2283 bp
Locus ID:	20351

UniProt ID:	Q62178
Cytogenetics:	3 F1
Gene Summary:	Cell surface receptor for PLXNB1, PLXNB2, PLXNB3 and PLXND1 that plays an important role in cell-cell signaling (PubMed:20043131, PubMed:17318185). Regulates glutamatergic and GABAergic synapse development (PubMed:29981480). Promotes the development of inhibitory synapses in a PLXNB1-dependent manner and promotes the development of excitatory synapses in a PLXNB2-dependent manner (PubMed:29981480). Plays a role in priming antigen-specific T-cells, promotes differentiation of Th1 T-helper cells, and thereby contributes to adaptive immunity (PubMed:15780988). Promotes phosphorylation of TIMD2 (PubMed:12374982). Inhibits angiogenesis (PubMed:17318185). Promotes axon growth cone collapse (PubMed:20043131). Inhibits axonal extension by providing local signals to specify territories inaccessible for growing axons (PubMed:20043131).[UniProtKB/Swiss-Prot Function]