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Product datasheet for RG202875

Semaphorin 3B (SEMA3B) (NM_001005914) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 3B (SEMA3B) (NM_001005914) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Semaphorin 3B
Synonyms:	LUCA-1; SemA; SEMA5; SEMAA; semaV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG202875 representing NM_001005914
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCGGGCCGGGGCTGCCGCCGTGATCCCGGGCCTGGCCCTGCTCTGGGCAGTGGGGCTGGGGAGTG
CCGCCCCCAGCCCCCCACGCCTTCGGCTCTCCTTCCAAGAGCTCCAGGCCTGGCATGGTCTCCAGACTTT
CAGCCTGGAGCGAACCTGCTGCTACCAGGCCTTGCTGGTGGATGAGGAGCGTGGACGCCTGTTTGTGGGT
GCCGAGAACCATGTGGCCTCCCTCAACCTGGACAACATCAGCAAGCGGGCCAAGAAGCTGGCCTGGCCGG
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AGGGGTGGCAGCAGACCTCATGGGACGAGACTTTACCATCTTTCGCAGCCTAGGGCAACGTCCAAGTCTC
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GGGACGCCTGTCCGTGTCCCGCGTTGGCCAGATCTGCCGGAACGACGTGGGCGGCCAGCGCAGCCTGGTC
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CTCCACGTCCAGCATCTTCCAGGGCTCTGCGGTGTGCGTGTACAGCATGAACGACGTGCGCCGGGCCTTC
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CGCGGCCAGGCATGTGCCCCAGCAAGACCTTTGGCACCTTCAGTTCCACCAAGGACTTCCCAGACGATGT
CATCCAGTTTGCGCGGAACCACCCCCTCATGTACAACTCTGTCCTGCCCACTGGGGGGCGCCCTCTTTTC
CTACAAGTTGGAGCCAATTACACCTTCACTCAAATTGCCGCGGACCGGGTTGCAGCCGCTGACGGACACT
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GGCAGCGCGAACTCCCTGCGCATGTGCCGCCCGCAGCCTGCGCTGCAGTCACTGCCCCTGGAGTCGCGGA
GAAAGGGCCGTAACCGGAGGACCCACGCCCCTGAGCCTCGCGCTGAGCGGGGGCCGCGCAGCGCAACGCA
CTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

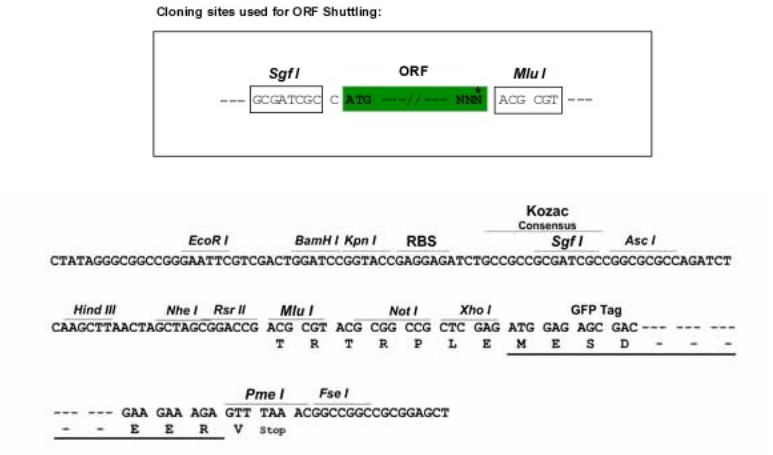
>RG202875 representing NM_001005914
Red=Cloning site Green=Tags(s)

MGRAGAAAVIPGLALLWAVGLGSAAPSPPRLRLSFQELQAWHGLQTFSLERTCCYQALLVDEERGRLFVG
AENHVASLNLDNISKRAKKLAWPAPVEWREECNWAGKDIGTECMNFVKLLHAYNRTHLLACGTGAFHPTC
AFVEVGHRAEEPVLRLDPGRIEDGKGKSPYDPRHRAASVLVGEELYSGVAADLMGRDFTIFRSLGQRPSL
RTEPHDSRWLNEPKFVKVFWIPESENPDDDKIYFFFRETAVEAAPALGRLSVSRVGQICRNDVGGQRSLV
NKWTTFLKARLVCSVPGVEGDTHFDQLQDVFLLSSRDHRTPLLYAVFSTSSIFQGSAVCVYSMNDVRRAF
LGPFAHKEGPMHQWVSYQGRVPYPRPGMCPSKTFGTFSSTKDFPDDVIQFARNHPLMYNSVLPTGGRPLF
LQVGANYTFTQIAADRVAAADGHYDVLFIGTDVGTVLKVISVPKGSRPSAEGLLLEELHVFEDSAAVTSM
QISSKRHQLYVASRSAVAQIALHRCAAHGRVCTECCLARDPYCAWDGVACTRFQPSAKRRFRRQDVRNGD
PSTLCSGDSSRPALLEHKVFGVEGSSAFLECEPRSLQARVEWTFQRAGVTAHTQVLAEERTERTARGLLL
RRLRRRDSGVYLCAAVEQGFTQPLRRLSLHVLSATQAERLARAEEAAPAAPPGPKLWYRDFLQLVEPGGG
GSANSLRMCRPQPALQSLPLESRRKGRNRRTHAPEPRAERGPRSATHW

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001005914

ORF Size: 2244 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_001005914.2

RefSeq Size: 2986 bp

RefSeq ORF: 2247 bp

Locus ID: 7869

UniProt ID: Q13214

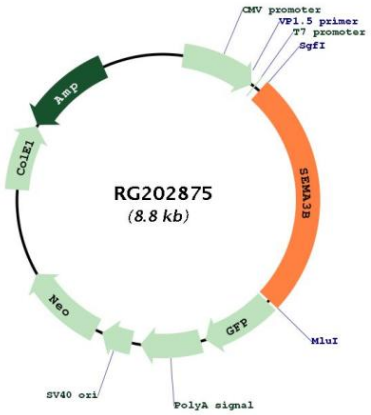
Cytogenetics: 3p21.31

Protein Families: Secreted Protein, Transmembrane

Protein Pathways: Axon guidance

Gene Summary: The protein encoded by this gene belongs to the class-3 semaphorin/collapsin family, whose members function in growth cone guidance during neuronal development. This family member inhibits axonal extension and has been shown to act as a tumor suppressor by inducing apoptosis. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Feb 2014]

Product images:



Circular map for RG202875