

Product datasheet for **RG238020**

Semaphorin 3B (SEMA3B) (NM_001290063) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 3B (SEMA3B) (NM_001290063) 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)
ORF Nucleotide Sequence:	>RG238020 representing NM_001290063. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTAACCGTCAGAATTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAACGACGTGCGCCGGGCTTCTTGGGACCCTTGCACACAAGGAGGGGCCATGCACCAAGTGGGTG
TCATACCAGGGTTCGGTCCCTACCCGCGGCCAGGCATGTGCCCCAGCAAGACCTTTGGCACCTTCAGT
TCCACCAAGGACTTCCAGACGATGTATCCAGTTTGGCGGAACCACCCCTCATGTACAACCTCTGTC
CTGCCACTGGGGGGCGCCCTCTTTTCTACAAGTTGGAGCCAATTACACCTTCACTCAAATTGCCGCG
GACCGGGTTGACGCCGTGACGGACACTATGACGTCCTCTTATTGGCACAGACGTTGGCACGGTGTG
AAGGTGATCTCGTCCCAAGGGCAGTAGGCCAGCGCAGAGGGGCTGCTCCTGGAGGAGCTGCACGTG
TTTGAGGACTCGGCCGTGTACCAGCATGCAAATTTCTTCCAAGAGGCACCAGCTGTACGTAGCCTCG
CGGAGCGCGGTGGCCAGATCGCGTTGCACCGCTGCGCTGCCACGGCCGCTGTGCACCGAATGCTGT
CTGGCGGTGACCCCTACTGCGCCTGGGACGGGTGCGCTGCACGCGCTTCCAGCCAGTGCCAAGAGG
CGGTTCCGGCGGCAAGACGTAAGGAATGGCGACCCAGCACGTTGTGCTCCGGAGACTCGTCTGTCCC
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GAGCGCACCGAGCGCACCGCCCGGGGACTACTGCTGCGCAGGCTGCGCGCCGGGACTCGGGCGTGTAC
TTGTGCGCGCCGTCGAGCAGGGCTTACGCAACCCTGCGTGCCTGTCGCTGTCGCTGTTGAGTGT
ACGCAGGCCGAACGACTGGCGCGGGCCGAGGAGGCTGCGCCCGCCGCGCCGGGCCCAAACTCTGG
TACCGGGACTTTTCTGCAGCTGGTGGAGCCGGGCGAGGTGGCAGCGGAACTCCCTGCGCATGTGCCG
CCGCGACCTGCGCTGCAGTCACTGCCCTGGAGTCCGGGAGAAAGGGCCGTAACCGGAGGACCCACGCG
CCTGAGCCTGCGCTGAGCGGGGCGCGCAGCGCAACGCACTGG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG238020
 Blue=ORF Red=Cloning site Green=Tag(s)

MNDVRR AFLGPF AHKEGPMHQVVS YQGRVYPRPGMCP SKTFGTFSSTKDFPDDVIQFARNHPLMYNSV
 LPTGGRPLFLQVGANYTFTQIAADRVAADGHYDVLFIGTDVGTVLKVISVPKGSRPSAEGLLLEELHV
 FEDSAAVTSMQISSKRHQLYVASRSVAQIALHRCAAHGRVCTECLARDPYCAWDGVACTRFQPSAKR
 RFRRQDVRNGDPSTLCSGDSSRPALLEHKVFGVEGSSAFLECEPRSLQARVEWTFQRAGVTAHTQVLAE
 ERTERARGLLLRRLRRRDSGVYLCAAVEQGFQPLRRLSLHVL SATQAERLARAEAAAPPGPKLW
 YRDFLQLVEPGGGSANSLRMC RPQPALQSLPLESRRKGRNRRTHAPEPRAERGPRRSATHW
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYP SGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001290063

ORF Size: 1218 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).

RefSeq: [NM_001290063.1](#), [NP_001276992.1](#)

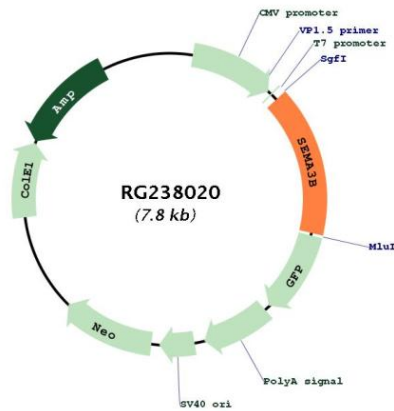
RefSeq Size: 2121 bp

RefSeq ORF: 1221 bp
 Locus ID: 7869
 UniProt ID: [Q13214](#)

Cytogenetics: 3p21.31
 Protein Families: Secreted Protein, Transmembrane
 Protein Pathways: Axon guidance
 MW: 45.5 kDa

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 RG238020