

Product datasheet for **RC239487**

Semaphorin 3B (SEMA3B) (NM_001290061) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Semaphorin 3B (SEMA3B) (NM_001290061) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Semaphorin 3B
Synonyms:	LUCA-1; SemA; SEMA5; SEMAA; semaV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC239487 representing NM_001290061
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGCGGGCCGGGGCTGCCGCCGTGATCCCGGGCTGGCCCTGCTCTGGGCAGTGGGGTGGGGAGTG
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Protein Sequence: >RC239487 representing NM_001290061
Red=Cloning site Green=Tags(s)

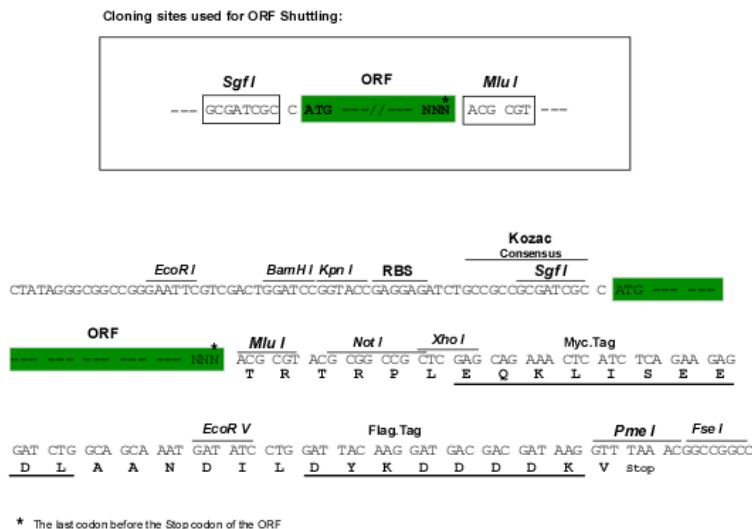
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 NKWTTFLKARLVCSVPGVEGDTHFDQLRPFPAEDVFLSSRDHRTPLLYAVFSTSSIFQGSAVCVYSMN
 DVRR AFLGPF AHKEGPMHQWVS YQGRVYPRPGMCP SKTFGTFSSTKDFPDDVIQFARNHPLMYSNVLPT
 GGRPLFLQVGANYTFTQIAADRVAADGHYDVLFIGTDVGTVLKVISVPKGSRPSAEGLLLEELHVFEDS
 AAVTSMQISSKRHLQYVASRSVAQIALHRCAAHGRVCTECLARDPYCAWDGVACTRFQPSAKRRFRRQ
 DVRNGDPSTLCSGDSSRPALLEHKVFGVEGSSAFLECEPRSLQARVEWTFQRAGVTAHTQVLAERTERT
 ARGLLLRRLRRRDSGVYLCAAVEQGTQPLRRLSLHVL SATQAERLARAEEAAPAAPP GPKLWYRDFLQL
 VEPGGGSANSLRMRQPALQSLPLESRRKGRNRRTHAPEPRAERGPR SATHW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001290061

ORF Size: 2262 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_001290061.1](#), [NP_001276990.1](#)

RefSeq Size: 2830 bp

RefSeq ORF: 2265 bp

Locus ID: 7869

UniProt ID: [Q13214](#)

Cytogenetics: 3p21.31

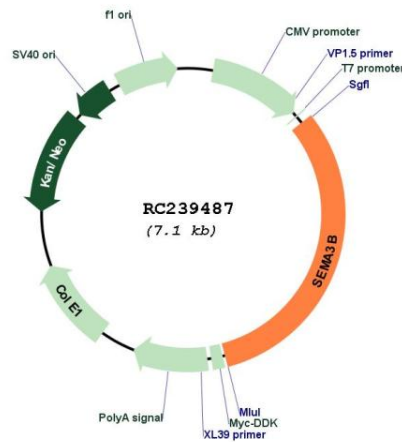
Protein Families: Secreted Protein, Transmembrane

Protein Pathways: Axon guidance

MW: 84.1 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 RC239487