

Product datasheet for **MC225021**

Plxnb3 (NM_019587) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Plxnb3 (NM_019587) Mouse Untagged Clone
Tag: Tag Free
Symbol: Plxnb3
Synonyms: AI451018; Plxn6
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC225021 representing NM_019587
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTGACTGACTTCCTCCAGGCTCCTGTGATGGCTCCCTGGTCTCCCTCAGCCTCCACCTGCTGCTGC
 TGTTCTCGCCGTGCTGCCTTTGACCAGGGTCCATCGCTTCTCTGTACCAAATACCAGCTCAACCACT
 GGTGCTGGCACCAGATCAGGGCAAACCTCTACGTGGGTGCAGTGAATCACCTCTTTAGCTCAGCCCTGAG
 CTGAAGATGGAGTCTGTGGCTGTCACTGGCCCTGTCAATTGACAGTCTGATTGTGTGCCCTTCCGTGACC
 TGGCTGAGTGCCACAGGCCAGCTCACTGACAATGCCAACCCAGCTCTTGTGGTGGAGCAGCAGGACACA
 GGAAGTGGTGGCTTGTGGCAAGTGAAGCAGGGTGTATGTGAGAAGCGGCCCTTGGGGATGTGACTCAA
 GTGTTGTACCAGGCTGAGGACCTGGTGTGGCAGTTTGTGGCTGCCAATACCTGGGAGTGACCACAG
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 AGCAGGAGTGCCACCCCTAACTGTGCGCCAGCTGGCTGGCCACAGCCTTCTCCAGTGAAGGACTGGGA
 AGACTTGTGGTGGTACTTTTCAGACTACAACAATAGCTATGTAGGAGCTTTTCTGATGCTCACTCTG
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 CCTCAGAGATGTCAACCTTTATTCTATGTGAAATGCCACTTACCTGCCATGGCCAGGGCCTTATCCAG
 GCTGCCTTCCCTTACTCCAGACACTTTGCTAGGTGCATTTTCAGCAGGCACAAGTCAGGCACAGGCCGCC
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 CCCTGGAGGCCAGCCTCTGCTGCAACTGGGACAGTCCATCAGTGCAGTGGCTGCTCTCCAGACAGATGG
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 TCCAACTGCACTACCTGTCTCCAGGCCAGGGACCCACTATGTGGTTGGTGCATCCTTCAGGGAAGGTG
 ACTCGGAGAGGCGAGTGTGGACGGCCAGCCAGCCAAACCACTGGCTGTGGAGCTACGAAGACAACCACT



GCCCTTACATCCAGAGCCTGCTACCAGCCCAACACCCCGTCAGGAACAGGGTCAGATCATTCTGTCTGT
 TCCTCGGCTGCCACCCTGGCCATGGATGAATACTTCCACTGTGCTTTTGGGGGTACAACAGTCTAGCT
 CAGGTGGAAGAACCCCATGTGGTCTGTACCACCCTCCTCAAGATCAGATGCCACCTAATCCTCCAGGCT
 CAGATCATGTACCTTGGCCCTGGCCCTAATGTTTGAGGATGTGGTATTGACCGCCACCACATTCTCCTT
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 CGGTGCCACTGGTGGCCCAAGTAGCCACTGTATATATGGAGAGCACTGCCAGAGGGTGAAAAGGCTG
 TCTACAGTGCCCAAGGAGTGGACATCTGGTTCTGTGGCCAGAGGCTTGGCCCAAGTTGAGGGTCTAGC
 AAGTCCCCAGTTGGTGCCTGTGGTTGGGAGAGCCATGTGACCCTGCACATTAGAACCTTCACTATTTTC
 CAAGGTCTGCCTGCCTTGTACCCTGCTGGCTAGAGCTGCCTGGAAAAGTCAAAAAGCTACCTGCCTCCT
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 GTGGGAGCTCCCAGTGCCCATCTATGTAACCAGGGGTGAGATCCAGCGGCTGGACAATGTGGTGATCTT
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 TTCACCTACCAGGACCCTGTCTGCTGAGCCTGAATCCTCAGTGGGGCCCCAGGCAGGGGGCACCAGC
 TCACCATCCATGGGCAGTATCTCCAGACAGGAGGCAACATCAGTGTCTTTGTGGGTGACCAACCTTGCC
 TATCCAGGAGCCTGTGTCTCCTGAAGCCATCATATGCCACACCATGCCCCAGACTGAGCCAGGAGAAGCA
 GTGGTCTCATAGTCTTTGGGCATGTTGAACGCAAACTGCTCACCACCCTTTTCGATACACAGCCAATC
 CCCAACTGGTGAAGCAGAGCCTAGTGTGAGCTCCGGGAGGTGGACGAGTATTGAGTACAGGGGTAC
 AGGCTTAGACGTTGTGTGGCACCCTTGTGTCTGTGTGGTGGAGGATGAGCCAAAAGTAAAGGGCTTG
 GGGGTTACAGGCCAGGATGCGAACCCTAAGGAGGAGCTGTGGTGGCCCTGCTGCAGATCCTCAGGCCTGTA
 TCCATCTTGAGAGTGGCTTACTACAGTGTCCACGCTCTGCTCTGTCAACTCATCCAGCCTCCTCTGTG
 CCACAGTCCAGCAGTGCCAGATGGGGCCCTCCCAAAGCGAGTCTTCTTTGCCCTAGACAACATGCAAGTA
 GACTTTGCCAGTGTAGTGGGGCCAGGGATTCTATACCAGCCTAACCCCTGCCTGGCTCCACTTAGTC
 ATGAGGGGATTACTACCCCTACCACCTCAAGCCAGGCCATGTCTAGATGTGGAGGGCAGGGCCCTCAA
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 AGTTTGTGGTGCAGATGGCAACCTGCGCCTGGCTCTAGGCCCTGTCCAGTACGAAGCAGAGTCCATGAT
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 CTCTCACCCTCATGTACAGGCACAAGAGCAAGAAGGCCTTGCAGACTATCAGAAGGTGCTGGTGCAGT
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 AGACCTCACCAGTGACCTAGAGGCCAGTGGGATTCCCTTCTGGACTACCGAACATATGCTGAGCGTGCC
 TTCTTCCCCGGCCATGTTGGCTGCCACTGCAGCCAGGGCTCGAGGGGCTTGGGGAAGAGGGTGCAGTG
 TCACCGTGCAGCCAGGCTCACACAACCTCCAATTTGCTCAACAGCAAGCTCTTCTTCTCACACTCAT
 CCACACCTTAGAGGAGCAGCCAAGCTTCTCCAGCGGGACCGCTGCCATGTGGCTTCACTACTTTCCCTG
 GCTCTGCACAGCAAGCTTGAGTATTTGACCGACATCATGAGAACTCTGCTTGGTGACCTAGCGGCCATT
 ATGTACACAAGAACCCCAAGCTCATGTTACGCAGGACGGAGACCATGGTAGAGAAGCTGCTACCAACTG
 GCTATCTATCTGTCTCTACACCTTCTTGAAGGAAGTGGCTGGCGAGCCACTGTACATGCTTTTCCGAGCC
 ATCAAGTACCAGGTGGACAAGGGCCCTGTGGACGCTGTGACAGGCAAGGCAAAACGAACTCTGAATGACA
 GCCACCTGCTACGAGAGGATGTGGAGTTCAGCCCTGACCCTGATGGCACTGGTGGGACCAGAGGCTGA
 TAGGGCAGCAGGGAACAGTGGAGTGCATCGAGTGCAGCCAGGGTGTGATACAGACACCATCACCCAA
 GTCAAGGAGAAGGTGTTGGACCAATCTACAAGGGAACCCCTTCTCCAGAGGCCTTCACTGCACTCCC
 TAGATCTTGAGTGGCGCTCAGGCCTAGTGGTCACTAACCTGTGAGTGGAGACTTGACCTCTGTGAC
 TCAAAACCACTGGAAGAGACTCAACACCCTACAACACTATAAGGTCCCAGATGGAGCAACAGTGGTACTC
 ATTCTCAGGTGCACAATGGTGGCACTGTTTCCAGAGTCTGGCCAGACTGGCTGCCCTTCTGGAGAGA
 ACACTCCCATGCTGGAAGATGGTGGAGGAAGTGGAGTTCGGCTCTGGCACCTGGTAAAGGCCACTGAGGA
 GGCAGAAGGGGCCAAAGTGCAGGCGCAGCAGCCTCCGAGATCGAGAACGAGAACGGTCAAGGCAAGGCC
 ATTCTGAAATCTATCTTACTCGCTTACTTTCAATGAAGGGCACCTGCAGAAGTTTGTGGATGACACCT
 TCCAGGCCATTCTTAGCATGAATCGGCCTGTGCCTATTGCTGTTAAGTACCTATTTGACTTCTGGATGA

GCTGGCAGAGAAACATGGCATTGAAGATCCAGAGACCCTGCACATTTGGAAGACAAACAGCCTACTTCTG
 CGATTCTGGGTGAATGTCTTGAAGAACCACAGCTCATCTTTGATGTACAAGTGTACAGACAACGAGGATG
 CCATCTTGGCTGTCATTGCACAGACTTTTCATCGATTCTCGATGGTCTCGGAGCATAAAGTGGGCCGGGA
 TTCCCCAGTGAACAACTGCTCTATGCCCGGGAGATCCCTCGCTACAAGCAGATGGTGGAGAAGTACTAT
 GCGGACATTGCCAGAGCTCTCCAGCAAGCTATCAAGAGATGAACTCAGCTCTGGCTGAAGTCTCTGGGA
 ATTATTCCTCTGCTCCCCACTGCCTGGAGGCTCTTCGAGAAGTTACAACCACATCCACAGGTATTATGA
 CCAGATTATCAGTGCCCTGGAGGAGACCCTGTGGCCAGAAGATGCAGCTGGCTTGCCGCTGCAGCAG
 GTGGCTGCCTTGGTGAATACAAAGTACTGACCTGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_019587

Insert Size:

5709 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](#)

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_019587.2](#), [NP_062533.2](#)

RefSeq Size:

6024 bp

RefSeq ORF:

5709 bp

Locus ID:

140571

UniProt ID:

[Q9QY40](#)

Cytogenetics:

X A7.3

Gene Summary:

Receptor for SEMA5A that plays a role in axon guidance, invasive growth and cell migration. Stimulates neurite outgrowth and mediates Ca(2+)/Mg(2+)-dependent cell aggregation. In glioma cells, SEMA5A stimulation of PLXNB3 results in the disassembly of F-actin stress fibers, disruption of focal adhesions and cellular collapse as well as inhibition of cell migration and invasion through ARHGDI A-mediated inactivation of RAC1 (By similarity). Seem to be non-essential for normal development and function of the central nervous system.
[UniProtKB/Swiss-Prot Function]