

## Product datasheet for **MC225008**

### Plxna1 (NM\_008881) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Plxna1 (NM_008881) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Plxna1
Synonyms:	2600013D04Rik; mKIAA4053; NOV; PlexA1; Plxn1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC225008 representing NM_008881 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCACTGCCACCTCTGAGCTCTCGGACACTGCTGCTGCTCTTGCTGCTGCTGAGGGGTGTGTGGA  
TAGCCATCAGCTCGCCCCAGCTGGTTGGGTCCACAACCTGCCTTCCGCACCTTTGTGGCCAGTGACTG  
GGGCTCACTCACCTGGTGGTTCACGAACAGACAGGAGAGGTATATGTTGGCGCTGTGAACCGTATTTAC  
AAGCTGTCGGGGAACCTAACCTGCTTCGGGCCATGTGACAGGCCCTGTAGAAGACAATGAGAAATGCT  
ACCCACCCCCAGTGTACAGTCTGCCACATGGTCTGGGCAGCACAGACAACGTCAACAAGCTTCTACT  
GCTGGACTATGCAGCCAACCGCCTGTTGGCCTGTGGCAGTGCCTCACAGGGCATCTGCCAGTTCCTGAGG  
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CTGGCAGCATGGCGGGAGTGCTCATTGCTGGGCCACCCGGCCAGGGCCAGGCCAAGCTCTTCGTGGGCAC  
ACCCATCGATGGCAAATCAGAATACTTCCCCACTCTGTCCAGTCGCCGGCTCATGGCCAACGAGGAAGAT  
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CACCTGCAGCTAGACACGCAGCTTACCTCGCCGACGCCGCTGGCGAGCACTTCTCACCTCCAAGATT  
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CAGGCCGCCCTGGCTTATGAAAGTGTGGTGGCTCAGGAGGGCAACCCTATCCTGCGTGACTGGTCTCT



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AGCCCCAACCGCCAGTACCTCTATGCTATGACGGAGAAGCAGGTGACGCAGGTGCCTGTGGAAAGCTGTG  
TCCAGTATACTTCTGTGAGCTGTGCCTGGGGTCTCGGGACCCCACTGTGGCTGGTGTCTCTGCACAG  
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CACTGTTCCGACAGCTGTTGACCAAGAAGCATTTCCTGCTAACCTTCACTCCGCACACTAGAGGCCAGCG  
TAGCTTCTCCATGCGTGACCGTGGGAACGTGGCCTCACTCATGACAGCCCTGCAGGGTGGATGGAG  
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CCAAGCTCCTGTTACGGAGGACCGAATCAGTGGCAGAGAAGATGTTGACCAACTGGTTCACCTTCTTTT  
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TCATCCTTCAGGACGAGGACGTACCACTAAAATTGACAATGACTGGAAGAGGCTGAACACACTAGTCA  
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TCCTCTACCTTACTAAGTCCCTCAGCAGATACGAGAGCATGCTGCGTACAGCCAGTAGCCCCGACAGCC  
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CCACGACCACCTGGACCAACGTGAAGGCGACCGTGGCAGCAAGATGGTCTCTGAGATCTACCTAACCCAGG  
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ACCGTGGCTCAGCCCTACCTCTGGCCATCAAGTACATGTTTGACTTCTTAGATGAGCAGGCCGACAAGCA  
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 GTGATTAAGAACCCTCAGTTCGTGTTTCGACATCCACAAGAAGCAGCATAACAGATGCCTGCCTCTCAGTGG  
 TAGCGCAGACCTTCATGGACTCTGTCTACATCAGAGCACAAGCTGGGCAAAGACTCACCTCCAACAA  
 GTTGCTCTATGCCAAGGACATCCCAACTACAAGAGCTGGGTTGAAAGGTACTATGCTGACATTGCCAAG  
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 GCCTGAGCAGCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2371\\_e06.zip](https://cdn.origene.com/chromatograms/ja2371_e06.zip)

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM\_008881

**Insert Size:** 5685 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](mailto: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\\_008881.2](#), [NP\\_032907.1](#)

**RefSeq Size:** 9045 bp

**RefSeq ORF:** 5685 bp

**Locus ID:** 18844

UniProt ID: [P70206](#)

Cytogenetics: 6 D1

**Gene Summary:** Coreceptor for SEMA3A, SEMA3C, SEMA3F and SEMA6D. Necessary for signaling by class 3 semaphorins and subsequent remodeling of the cytoskeleton. Plays a role in axon guidance, invasive growth and cell migration. Class 3 semaphorins bind to a complex composed of a neuropilin and a plexin. The plexin modulates the affinity of the complex for specific semaphorins, and its cytoplasmic domain is required for the activation of down-stream signaling events in the cytoplasm.[UniProtKB/Swiss-Prot Function]