

## Product datasheet for MR226796

### Plxna1 (NM\_008881) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Plxna1 (NM_008881) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plxna1
Synonyms:	2600013D04Rik; mKIAA4053; NOV; PlexA1; Plxn1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226796 representing NM_008881 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCACTGCCACCTCTGAGCTCTCGGACACTGCTGCTGCTCTTGCTGCTGCTGAGGGGTGTGTGGA  
TAGCCATCAGCTCGCCCCAGCTGGTTGGGTCCACAACCTGCCTTCCGCACCTTTGTGGCCAGTGACTG  
GGGCTCACTCACCTGGTGGTTCACGAACAGACAGGAGAGGTATATGTTGGCGCTGTGAACCGTATTTAC  
AAGCTGTCGGGGAACCTAACCTGCTTCGGGCCATGTGACAGGCCCTGTAGAAGACAATGAGAAATGCT  
ACCCACCCCGAGTGTACAGTCTGCCACATGGTCTGGGCAGCACAGACAACGTCAACAAGCTTCTACT  
GCTGGACTATGCAGCCAACCGCCTGTTGGCCTGTGGCAGTGCCTCACAGGGCATCTGCCAGTTCCTGAGG  
TTGGACGATCTCTCAAGCTGGGCGAGCCGACCACCGCAAGGAACACTACCTGTCCAGTGTTCGAGAGG  
CTGGCAGCATGGCGGGAGTGCTCATTGCTGGGCCACCCGGCCAGGGCCAGGCCAAGCTCTTCGTGGGCAC  
ACCCATCGATGGCAAATCAGAATACTTCCCCACTCTGTCCAGTCGCCGGCTCATGGCCAACGAGGAAGAT  
GCTGACATGTTTGGCTTTGTGTACCAGGATGAGTTTGTGTATCTCAGCTCAAGATCCCTCAGACACAT  
TGTCGAAGTCCAGCCTTTGACATCTACTATGTGTACAGTTCCGCAGCGAGCAGTTTCGTATACTACCT  
CACCTGCAGCTAGACACGCAGCTTACCTCGCCGACGCCGCTGGCGAGCACTTCTCACCTCCAAGATT  
GTGCGGCTGTGCGTGAATGACCCCAAGTCTACTCTTACGTGGAGTTCCCAATTGGCTGGCAGCAGGCTG  
GGTGGAGTATCGGCTGGTGCAGGACGCCCTACCTGAGCCGGCCGGACAGGCCCTGGCCAACAGCTGGG  
CCTGGCTGAGGATGAGGAGGTGTTGTTCACTGTGTTTCGCACAGGGCCAGAAGAACCAGCTGAAGCCACC  
AAGGAGTCGGCGCTGTGCTGTTCACTGAGGGCCATCAAGGAGAAAATCAAGGAGCGCATCCAATCCT  
GCTACCGTGGAGAAGGAAAGCTCTCCCTGCCTTGCTGCTCAACAAGGAGCTGGGCTGCATCAACTCGCC  
CCTGCAGATTGATGACGACTTCTGCGGGCAGGATTTCAACCAGCCACTGGGTGGCAGGTCACCATCGAG  
GGCACACCCCTTTTGTGACAAGGAAGATGGCCTGACTGCTGTGGCTGCCTATGACTACCAAGGCCGCA  
CCGTGGTTTTTGTGCTGCACTCGCAGCGCCGCATCCGCAAGATTCTGGTGGACCTTGCAACCCAGCGG  
CAGGCCGCCCTGGCTTATGAAAGTGTGGTGGCTCAGGAGGGCAACCCTATCCTGCTGACTGGTCTCT



AGCCCCAACCGCCAGTACCTCTATGCTATGACGGAGAAGCAGGTGACGCAGGTGCCTGTGGAAAGCTGTG  
TCCAGTATACTTCTGTGAGCTGTGCCTGGGGTCTCGGGACCCCACTGTGGCTGGTGTGCTCCTGCACAG  
CATCTGCTCTAGGCAGGATGCCTGTGAGCGGGCAGAAGAGCCCAAGCGTTTTGCCCTGACCTGTGCAG  
TGTGTGCAGTTAACTGTCCAGCCGCGCAATGTGTCACTCACCATGTCCCAGGTGCCGCTCGTGTGCAGG  
CTTGGAATGTGCCTGACCTCTCAGCTGGTGTCACTGCTCCTTTGAGGACTTCACGGAGACTGAGAGCAT  
CCTGGAAGATGGCCGCATCCATTGCCACTCACCTTCTGCCGGGAAGTGGCGCCCATCACACAGGGTCA  
GGAGACCAGCGGGTGGTGAAGCTCACTCAAGTCCAAGGAGACAGGGAAGAAGTTGCATCTGTGGACT  
TTGTCTTCTATAACTGCAGTGTTCAACAGTCTGCCTGGCATGTGTCAACGGCTCCCTCCCTGCCATTG  
GTGCAAAATACCGCCATGTTTGCACCAACAATGCGGCTGACTGCGCCTTTCTGGAAGGCCGAGTCAACATG  
TCTGAGGACTGCCACAGATCCTGCCTTACCCACATCTATGTGCCAGTGGGTGTGGTGAAGCCCATCA  
CCCTGGCTGCACGGAACCTGCCGAGCCACAGTCGGGTCAAGGAGGTACGAGTGCCTTTCCACATCCC  
AGGCAGCCCGGCCGAGTCACTGCACTGCGCTTCAACAGCTCCAGCTGCAGTGCAGAACTCCTCGTAC  
TCCTATGAGGGGAATGATGTCAGCGATCTGCCTGTGAACCTGTCGGTGTGTGGAATGGCAACTTTGTCA  
TTGACAACCCCAAGAACATCCAGGCCACCTCTACAAGTCCCAGCCTTGCGCCAGAGTTGTGCCCTCTG  
CCTCAAGGCAGACCCACGCTTTGAGTGGGCTGGTGCCTAGCTGAGCGCCGCTGTCCCTTCGTACCAC  
TGCCAGCTGACTCACCAGCCTCCTGGATGCATGCCACCATGGCAGCAGCCGCTGCACAGACCCCAAGA  
TTCTCAAGCTGTCCCAAGAGACAGGCCCTCGGCAGGGAGGGACTCGACTAACCATCACCGGTGAGAACT  
GGGCTCCGGTTGAGGATGTGCGGCTAGGCGTGCACGTGGGCAAGGTGCTTTGCAGCCCTGTGGAGAGC  
GAGTACATCAGCGCAGAACAGATTGCTGCGAGATTGGAGATGCCAGCAGCTGCGGGCCCATGATGCC  
TGGTGGAGGTGTGTGCGGGACTGCTCCCTCCACTACCGAGCGCTGCCCTAACCGCTTCACTTTTGT  
GACACCGACCTTCTACCGTGTGAGCCCCCTCCGTGGGCTCTGTCTGGAGGTACCTGGATTGGCATCGAA  
GGGAGCCATCTGAATGCTGGCAGTGTAGCTGTGTCATTGGCGTGGCCCTGCTCCTTCTCCTGGA  
GAAACTCAGGAGATCCGCTGCTGACACCCCGGGCACACTCCTGGCAGCCCTTATTGTTATCAA  
CATCAATCGTGGCCAGCTCTCAACCCCGAGGTGAAGTACAATACTGAAAGACCTACTATCCTGAGG  
ATCGACCTGAGTGGAGCATCAATAGTGGTGGGACCCTCCTAACAGTCACGGGCACCAACCTGGCCACTG  
TCCGTGAACCTCGAATCCGCGCCAAGTATGGAGGCATTGAGAGGGAAAATAGCTGCATGGTGTACAATGA  
CACCACCATGGTGTGCCGGGCGCGTCTATAGACAACCCAAAGCGCAGCCCGCCAGAACTGGGAGAGCGG  
CCAGATGAGATTGGTTTCATCATGGACAATGTGCGCACGCTGCTGGTACTCAACAGCTCCTCCTCTCT  
ACTACCCGGACCTGTACTGGAGCCACTAGCCCTACTGGGCTCTTGGAGCTGAAGCCAGCTCCCCGCT  
CATCCTCAAGGGGCGGAATCCTGCCACCTGCTCCTGGCAATCCCGGCTCAACTACACGGTGTCTATC  
GGTCCACACCTTGATCCTCACCGTGTCTGAGACACAGCTGCTGTGTGAAGACCCAACCTCACGGGGC  
AGCACAAGTACGGTGGCGGGCCGGGGCTTCGAGTTCTACCTGGGATGCTGCAGGTGATTGGAGACAG  
CCTGCTGACACTGCCGGCCATTGTGGGTATCGGTGGTGGGGTGGCCTCTTGTGCTGGTGTATCGTGGCT  
GTGCTCATCGCCTACAAACGCAAAATCCCGGGATGCTGACCGTACCCTCAAGCGGCTGCAGCTCCAGATGG  
ACAACCTGGAGTACGGGTGGCCCTCGAGTGCAAGGAAGCTTTTGCAGAGCTACAGACGGACATCCATGA  
GCTGACCAGTACCTGGATGGTGTGGCATCCCCTTCTTACTACCGCACATATGCCATGCGAGTGTCTG  
TTTCTGGGATTGAGGACCATCCTGTACTGAAGGAGATGGAGGTGCAGGCCAATGTGGAGAAGTCTGTGA  
CACTGTTCCGACAGCTGTTGACCAAGAAGCATTTCCTGCTAACCTTCTCCGCACACTAGAGGCCAGCG  
TAGCTTCTCCATGCGTGACCGTGGGAACGTGCCCTCACTCATGACAGCCCTGCAGGGTGGATGGAG  
TATGCCACAGGAGTGTAAAGCAGTTGCTGTCTGACCTCATCGAGAAAACTAGAAAGCAAGAACCACC  
CCAAGCTCCTGTTACGGAGGACCGAATCAGTGGCAGAGAAGATGTTGACCAACTGGTTCACCTTCTTTT  
GTATAAGTTCTCAAGGAGTGTGCTGGGGAGCCGCTTTTATGCTGTACTGTGCCATCAAGCAGCAGATG  
GAGAAGGGCCCTATTGACGCCATCACAGGGGAGGCCCGCTACTCTCTGAGCGAAGACAAGCTCATTGCGC  
AGCAGATTGACTACAAGACCTGACCCTGAACTGCGTGAACCTGAACATGAGAATGCGCCCGAGGTTCC  
TGTGAAGGGCTGAACTGTGACACCGTGAACCCAGGTCAAGGAGAAGCTCCTGGATGCTGTGTACAAGGT  
GTGCCCTACTCACAGCGGCCGAAGGCCGGGACATGGACCTGGAGTGGCGCCAGGGTGCATGGCAGCA  
TCATCCTTCAAGGACGAGGACGTACCACTAAAATTGACAATGACTGGAAGAGGCTGAACACACTAGTCA  
CTATCAGGTGACGGATGGGTATCGGTGGCACTAGTACCAAGCAGACATCGGCCACAACATCTCCAAC  
TCCTCTACCTTACTAAGTCCCTCAGCAGATACGAGAGCATGCTGCGTACAGCCAGTAGCCCCGACAGCC  
TACGCTCACGAACACCCATGATCACGCCAGACCTGGAAAGTGGAAACAAACTGTGGCACCTGGTGAAGAA  
CCACGACCACCTGGACCAACGTGAAGGCGACCGTGGCAGCAAGATGGTCTCTGAGATCTACCTAACCCAGG  
CTGCTGGCCACCAAGGGAACACTACAAAAGTTCGTGGATGACCTGTTGAGAGCCTTTCAGCACGGCGC

ACCGTGGCTCAGCCCTACCTCTGGCCATCAAGTACATGTTTGACTTCTTAGATGAGCAGGCCGACAAGCA  
 TCAGATCCACGACTCAGATGTGCGCCATACCTGGAAGAGCAATTGCCTGCCTCTGCGCTTCTGGGTGAAT  
 GTGATTAAGAACCCTCAGTTCGTGTTTCGACATCCACAAGAAGCAGCATAACAGATGCCTGCCTCTCAGTGG  
 TAGCGCAGACCTTCATGGACTCTGTCTACATCAGAGCACAAGCTGGGCAAAGACTCACCTCCAACAA  
 GTTGCTCTATGCCAAGGACATCCCCAACTACAAGAGCTGGGTTGAAAGGTTACTATGCTGACATTGCCAAG  
 ATGCCTGCAATCAGTGACCAAGACATGAGCGCCTACCTGGCAGAGCAGTCCCGGCTGCATCTCAGCCAGT  
 TCAACAGCATGAGTGCCTGCACGAGATCTACTCTACATCGCCAAGTACAAGGACGAGATTCTGGTGGC  
 TCTGGAGAAAGATGAACAGGCTCGAAGGACGCGCTTCAAGCAAAGTGGAGCAGGTGGTGACACAATG  
 GCCTGAGCAGC

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR226796 representing NM\_008881  
 Red=Cloning site Green=Tags(s)

MPLPPLSSRTLLLLLLLLLRLGVWIAISSPPAGLGPQAFRTFVASDWGLTHLVVHEQTGEVYVYVAVNRIY  
 KLSGNLTLRAHVTGPVEDNEKCYPPPSVQSCPHGLGSTDNVNKLKLLLDYANRLLACGSASQIGCQFLR  
 LDDLFLKGEPHHRKEHYLSSVREAGSMAGVLIAGPPGQQAQKLVGTPIDGKSEYFPTLSSRRLMANEED  
 ADMFGFVYQDEFVSSQLKIPSDTLKFPFADIIYVYSFRSEQFVYYLTLQLDTQLTSPDAAGEHFFTSKI  
 VRLCVNDPKFYSYVEFPIGCEQAGVEYRLVQDAYLSRPGQALAKQLGLAEDEEVLFTVFAQGQKNRVKPP  
 KESALCLFTLRAIKEKIKERIQSCYRGEKLSLPWLLNKLGCINSPLQIDDDFCGQDFNQPLGGVTIE  
 GTPLFVDKEDGLTAVAAVDYQGRVYVFAGRTRSGRIRKILVDLANPSGRPALAYESVVAQGNPILRDLVL  
 SPNRQYLYAMTEKQVTQVPVESCQYTSCELCGSRDPHCGWCVLHSICSRQDACERAEEPQRFASDLLQ  
 CVQLTVQPRNVSVTMSQVPLVLQAWNVPDL SAGVNCSEDFDTETESILEDGRIHCHSPSAREVAPITQGG  
 GDQRVVKLYLKSKEGKFAVDFVFNCSVHQSCLACVNGSFPCHWCKYRHVCTNNAADCAFLEGRVNM  
 SEDCPQILPSTHIYVPGVVKPITLAARNLPQPQSGQRGYECLFHIPGSPARVTALRFNSSSLQCQNSSY  
 SYEGNDVSDLPVNL SVVWNGNFVIDNPQNIQAHL YKCPALRQSCGLCLKADPRFECGWCVAERRCSLRHH  
 CPADSPASWMAHHGSSRCTDPKILKLSPETGPRQGGTRLTITGENLGLRFEDVRLGVHVGVKLCSPVES  
 EYISAEQIVCEIGDASTLRAHDALVEVCVRDCSLHYRALSPKRF T FVTPTFYRVSPSRGPLSGGTWIGIE  
 GSHLNAGSDVAVSIGGRPCFSWRNSREIRCLTPPGHTPGSAPIVININRAQLSNPEVKYNYTEDPTILR  
 IDPEWSINSGGTLTIVTGTNLATVREPRIRAKYGGIERENSCMVYNDTTMVCRAPSIDNPKRSPPELGER  
 PDEIGFIMDNVRTLLVLNSSFLLYYPDPVLEPLSPTGLLELKPSSPLILKGRNLLPPAPGNSRLNYTVLI  
 GSTPCILTVSETQLLCEAPNL TGQHKVTVRAGGFEPSPGMLQVYSDSLLTLP AIVGIGGGGGLLLVIVA  
 VLIAYKRKSRDADRTLKRLQLQMDNLESVALECKEAF AELQTDIHEL TSDLDGAGIPFLDYRTYAMRVL  
 FPGIEDHPVLKEMEVQANVEKSL TLFQQLTKKHFLTF IRTLEAQRFSMRDRGNVASLIMTALQGEME  
 YATGVLKQLSDLIEKNLESKNHPKLLLRRTESVAEKML TNWFTFLLYKFLKECAGEPLFMYCAIKQQM  
 EKGPIDAITGEARYSL SEDKLI RQQIDYKTL TLNVCNPEHENAPEVPVKGLNCDT VTVQVEKLLDAVYKG  
 VPYSQRPKAGMDLEWRQGRMARIILQDEVTTKIDNDWKRLNLAHYQVTDGSSVALVPKQTSAYNISN  
 SSTFTKSLSRYESMLRTASSPDSLRSRTPMITPDLESGTKLWHLVKNHDHLDQREGDRGSKMVSEIYLTR  
 LLATKGT LKQFVDDL FETIFSTAHRSALPLAIKYMDFLDEQADKHQIHSDVDRHTWKSNLPLRFVWN  
 VIKNPQFVFDIHKNSITDACLSVVAQT FMDSCSTSEHKL GKDPSNKL LYAKDIPNYKSWVERYYADIAK  
 MPAISDQMSAYLAEQSRHLHSQFNMSALHEIYSYIAKYKDEILVALEKDEQARRQLRSKLEQVVDTM  
 ALSS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9027\\_e12.zip](https://cdn.origene.com/chromatograms/mm9027_e12.zip)

**Restriction Sites:**

Sgfl-MluI



**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

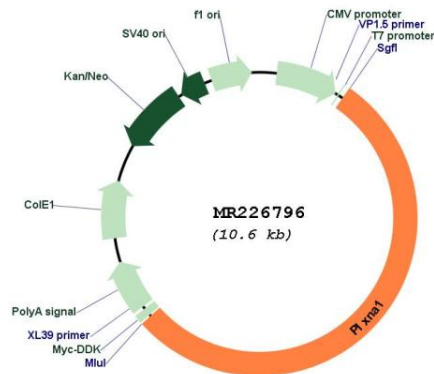
**UniProt ID:** [P70206](#)

**Cytogenetics:** 6 D1

**MW:** 211.5 kDa

**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]

**Product images:**



Circular map for MR226796