OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG226328

Plxna4 (NM_175750) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plxna4 (NM_175750) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Plxna4
Synonyms:	9330117B14; mKIAA1550; Plxa4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG226328 representing NM_175750
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCTGGAACTGGACTTGCCTGCTCTCCCACCTGCTGGTGGTAGGGATGGGCTCCTCCACTCTGCTTC
CACGACAGCCACCCCAGCTGTCTCAGAAGCCTTCCTTTGTGACATTCCGAGGGGAGCCTGCTGAGGGCTT
CAATCACCTTGTGGTGGATGAGAGGACAGGGCACATTTATTTGGGGGCTGTCAACAGAATCTACAAACTC
TCTAGTGACCTCAAGGTCTTGGTGACTCATCAGACAGGGCCAGATGAGGACAACCCCAAGTGTTACCCAC
CTCGGATTGTTCAGACCTGCAATGAGCCTCTGGCCAGCACCAATAACGTCAACAAGATGCTGCTTATAGA
CTACAAAGAAAACAGGCTGATCGCGTGTGGGAGCCTGTACCAGGGTATCTGCAAGCTCCTGAGGCTAGAG
GACCTCTTCAAGTTGGGAGAGCCCTTTCACAAGAAGGAACATTATCTCTCGGGAGTTAACGAGAGTGGCT
CAGTCTTTGGGGTGATTGTTTCCTACAGCAACTTTGATGACAAACTCTTTATTGCCACAGCAGTGGATGG
CAAACCTGAATATTTTCCTACCATCTCCAGCAGGAAGCTGACTAAGAACTCTGAGGCCGATGGCATGTTT
GCTTACGTTTTCCACGATGAATTTGTGGCCTCTATGATTAAGATCCCTTCAGACACTTTCACGGTTATCC
CCGACTTTGACATCTACTACGTCTATGGCTTCAGCAGTGGCAATTTTGTCTACTTTTTGACCCTTCAGCC
AGAGATGGTGTCTCCCCCAGGCTCCACGACAAAGGAGCAGGTGTACACCTCAAAGCTTGTGAGGCTTTGC
AAAGAGGACACAGCCTTCAACTCCTACGTAGAGGTGCCCATTGGCTGTGAGCGCAATGGGGTGGAGTATC
GCTTGTTACAGGCTGCCTACTTGTCTAAAGCTGGTGCAGTGCTTGGCCGGACCCTAGGAGTCCGCCCAGA
TGACGACCTCCTCTTCACCGTCTTCTCCAAGGGCCAGAAGCGGAAGATGAAATCTCTGGATGAGTCTGCC
CTGTGCATCTTCATCTTGAAGCAGATCAATGATCGCATTAAGGACCGCCTGCAGTCCTGTTATAGGGGTG
AGGGAACACTAGACCTGGCCTGGCTCAAGGTGAAGGACATCCCTTGCAGCAGTGCGCTCCTTACTATTGA
TGACAACTTCTGTGGCCTGGATATGAATGCTCCTCTGGGAGTTTCCGAAATGGTGCGTGGCATTCCAGTC
TTCACAGAAGACAGGGACCGCATGACTTCTGTCATCGCCTATGTCTACAAGAACCACTCACTGGCCTTCG
TGGGCACCAAAAGTGGCAAGCTGAAGAAGATCCGGGTTGATGGGCCCAAGGGAAATGCCCTCCAATATGA
GACTGTGCAGGTGGTGGACTCAGGACCAGTCCTCCGGGACATGGCCTTTTCCAAGGACCACGAGCAACTC

View online »

TACATCATGTCAGAAAGGCAGCTTACCAGAGTTCCTGTGGAGTCCTGTGGGCAGTACCGGAGCTGTGGCG
AGTGTCTTGGCTCAGGTGACCCCCATTGTGGCTGGTGTGTGCTCCACAACACGTGCACCCGGAAGGAACG
GTGTGAACGCTCCAGAGAACCCCGAAGGTTTGCCTCAGAGATGAAGCAGTGTGTCCGGCTGACGGTCCAT
CCCAACAACATCTCTGTCTCTCAGTACAACGTGCTGCTGGTCCTAGAGACATACAATGTCCCGGAGCTGT
CAGCAGGTGTCAACTGTACCTTTGAAGATCTGTCAGAGATGGATGGGCTGGTAATAGGCAATCAGATCCA
GTGCTACTCCCCTGCAGCCAAGGAAGTGCCCCGGATCATCACAGAAAATGGGGACCATCATGTTGTCCAG
CTGCAACTCAAGTCAAAGGAGACTGGGATGACCTTCGCCAGCACCAGCTTTGTCTTCTACAACTGCAGTG
TCCACAATTCATGCCTGTCCTGTGTGGAGAGCCCGTACCGTTGCCACTGGTGTAAATACCGGCATGTTTG
TACTCACGACCCCAACACATGCTCCTTCCAGGAAGGCCGAGTGAAGCTACCTGAGGACTGCCCCCAGCTG
CTGCGAGTGGACAAGATCCTCGTTCCAGTAGAGGTGATCAAGCCCATCACTCTGAAGGCTAAGAACCTCC
CACAGCCTCAGTCGGGACAGAGAGGCTACGAGTGCATCTTGAACATCCAGGGCATCGAGCAGAGGGTACC
TGCTCTGCGCTTCAACAGCTCCAGTGTGCAGTGTCAGAACACCTCCTATTCCTATGAAGGAATGGAGATC
AACAACCTGCCAGTGGAGTTGACAGTCGTGTGGAATGGACACTTCAACATTGACAACCCAGCTCAGAATA
AAGTTTACCTCTACAAGTGTGGAGCCATGCGCGAGAGCTGTGGGCTGTGCCTCAAGGCCGACCCGGATTT
CGAGTGTGGCTGGTGTCAGAGCCCAGGCCAGTGTACCCTGCGCCAGCACTGCCCTGCCCATGAGAGCCGG
TGGTTGGAACTGTCGGGGGCCAACAGCAAGTGCACCAACCCTCGTATCACAGAGATCATCCCAGTGACGG
GCCCTCGAGAAGGGGGCACCAAGGTCACCATCCGAGGGGAGAACTTGGGCCTGGAATTCCGTGACATTGC
ATCACACGTGAAAGTGGCTGGTGTGGAATGCAGCCCCTTGGTGGATGGCTACATCCCAGCTGAACAGATC
GTGTGTGAGATGGGTGAGGCCAAGCCTAGCCAGCATGCAGGCTTTGTGGAGATCTGTGTGGCTGTGTGTC
GGCCTGAGTTCATGGCCCGCTCTTCGCAGCTCTATTACTTCATGACTCTGACCCTCGCAGATCTGAAGCC
CAACCGAGGACCCATGTCTGGGGGGACACAGGTTACCATCACAGGTACCAACTTGAATGCAGGCAGCAAT
GTTGTGGTGATGTTCGGGAGCCAGCCCTGCCTCTTCCACAGGCGCTCTCCATCCTACATTATCTGTAACA
CTACATCCTCAGAGGAGGTGCTGGACATGAAGGTGACTGTGCAGGTGGACAGGGCCAGGATCCGCCAGGA
CCTGGTCTTTCAGTACGTGGAGGACCCCACCATTGTGCGGATTGAACCAGAATGGAGCATTGTCAGTGGG
AACACACCTATTGCTGTCTGGGGAACTCACCTGGACCTCATACAGAACCCACAGATCCGTGCCAAGCATG
GAGGAAAAGAACACATCAACATCTGTGAGGTCCTAAATGCTACAGAGATGACCTGCCAGGCTCCAGCCCT
TGCCCTGGGTCCCGACCACCAGTCAGATCTCACTGAGAGGCCTGAAGAATTTGGTTTCATCCTGGACAAT
GTCCAGTCTCTGCTAATTCTCAACAAGACCAACTTCACCTATTATCCTAACCCCGTGTTTGAGGCTTTCA
GTCCCTCGGGAATCCTGGAGCTCAAGCCGGGCACCCCCATTATCCTAAAGGGCAAGAACTTGATCCCGCC
TGTGGCCGGAGGCAATGTGAAGCTGAACTACACCGTGCTGGTTGGGGAGAAACCATGCACCGTGACAGTA
TCAGATGTGCAGCTGCTCTGCGAGTCTCCCAACCTCATCGGCAGGCACAAAGTGATGGCACGGGTGGGTG
GCATGGAGTATTCCCCTGGGATGGTATACATCGCCCCAGACAGCCCGCTCAGCCTGCCCGCCATTGTCAG
CATCGCGGTGGCTGGTGGCCTCCTCATCATCTTCATCGTGGCCGTACTCATCGCCTACAAACGCAAATCC
CGAGAAAGTGACCTCACGCTGAAGAGGTTGCAGATGCAGATGGACAACCTTGAGTCCCGTGTGGCGCTGG
AGTGCAAGGAAGCTTTTGCCGAGCTGCAGACAGATATCCATGAGCTTACCAGTGACCTGGATGGAGCTGG
GATTCCCTTTCTGGACTACAGAACCTATACCATGCGGGTGCTGTTCCCAGGGATTGAAGACCACCCTGTG
CTACGAGACCTTGAGGTCCCAGGCTACCGGCAGGAGCGTGTGGAGAAAGGACTCAAGCTCTTCGCCCAGC
TCATCAACAACAAGGTGTTCCTGCTCTCTTTCATCCGCACTCTGGAGTCTCAGCGCAGTTTTTCCATGCG
CGACCGAGGTAACGTGGCCTCCCTCATCATGACGGTACTTCAGAGCAAGCTAGAGTATGCCACTGACGTG
CTGAAGCAGCTACTGGCTGACCTCATTGATAAGAACCTGGAGAGCAAGAACCACCCCAAGCTGCTGCTCA
GGAGGACGGAGTCGGTGGCCGAGAAGATGTTGACTAATTGGTTCACTTTCCTCCTCTACAAGTTCCTCAA
GGAGTGTGCTGGGGAGCCACTCTTCTCCCTGTTCTGTGCCATCAAGCAGCAGATGGAGAAGGGCCCCATT
GATGCCATCACCGGAGAGGCCCGCTACTCGCTAAGTGAGGACAAACTCATCCGACAGCAGATTGAATATA
AAACCTTGGTCCTGAGCTGTGTCAGTCCAGATAATGTTAACAGCCCAGAGGTCCCAGTGAAGATCCTCAA
CTGTGACACCATCACTCAGGTCAAAGAGAAGATCCTAGATGCCATCTTCAAGAATGTCCCGTGCTCCCAT
AGGCCCAAAGCTGCAGACATGGATCTAGAGTGGCGACAAGGAAGTGGGGCGAGGATGATCCTGCAGGACG
AAGATATCACCACCAAGATCGAGAATGATTGGAAGAGACTCAACACAGTAGCCCACTACCAGGTACCAGA
TGGTTCTGTGGTGGCTTTAGTGTCCAAGCAAGTGACAGCCTACAATGCAGTGAACAACTCCACTGTCTCC
AGGACTTCAGCAAGTAAATATGAGAACATGATCCGGTACACAGGCAGCCCTGACAGCCTCCGTTCCCGGA
CACCCATGATCACCCCTGACCTGGAAAGCGGGGTCAAGCTTTGGCATCTGGTGAAGAACCATGAACATGG
AGACCAGAAGGAGGGGGACCGGGGGAGCAAGATGGTGTCTGAGATCTATCTGACACGACTATTGGCCACA
AAGGGCACACTGCAGAAGTTTGTGGATGACCTATTCGAGACCATCTTCAGTACGGCCCACCGTGGCTCCG

CTCTGCCGCTAGCCATCAAGTACATGTTTGACTTCCTCGATGAGCAGGCTGATAAGCACGGCATCCATGA
CCCGCACGTCCGCCACACCTGGAAGAGCAACTGCCTGCCCCTACGGTTTTGGGTGAATATGATCAAGAAC
CCTCAGTTTGTGTTTGACATCCATAAGAACAGCATCACGGATGCCTGTCTCTCTGTGGTGGCCCAGACCT
TCATGGACTCCTGCTCCACTTCGGAGCACCGACTGGGCAAGGATTCCCCCTCCAACAAGCTGCTCTATGC
CAAGGACATCCCCAGCTACAAGAACTGGGTAGAGAGGTATTATTCAGACATTGGGAAGATGCCGGCAATA
AGTGACCAGGACATGAATGCATACCTGGCCGAGCAGTCGCGGATGCACATGAATGAGTTCAATACGATGA
GTGCGCTCTCAGAGATCTTCTCCTATGTGGGCAAATACAGTGAGGAGATCCTTGGACCCCTGGACCATGA
TGACCAGTGTGGAAAGCAGAAACTGGCTTACAAACTAGAACAAGTCATAACTCTCATGAGCTTAGACAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

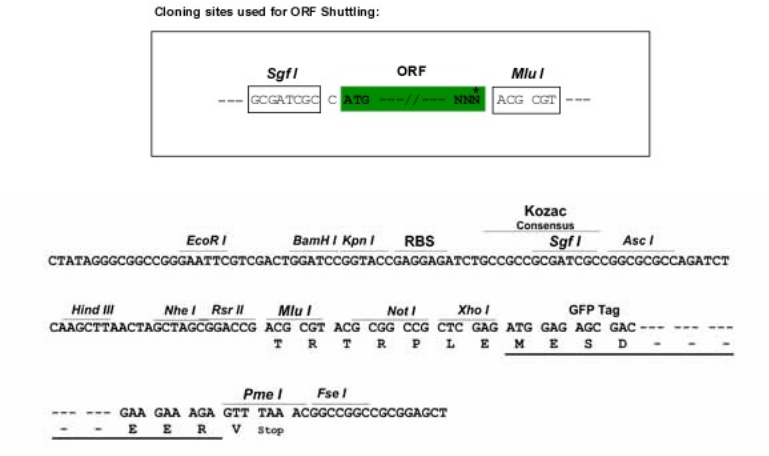
>MG226328 representing NM_175750
Red=Cloning site Green=Tags(s)

MPWNWTCLLSHLLVVGMGSSTLLPRQPPQLSQKPSFVTFRGEPAEGFNHLVVDERTGHIYLGAVNRIYKL
SSDLKVLVTHQTGPDEDNPKCYPPRIVQTCNEPLASTNNVNKMLLIDYKENRLIACGSLYQGICKLLRLE
DLFKLGEPFHKKEHYLSGVNESGSVFGVIVSYSNFDDKLFIATAVDGKPEYFPTISSRKLTKNSEADGMF
AYVFHDEFVASMIKIPSDTFTVIPDFDIYYVYGFSSGNFVYFLTLQPEMVSPPGSTTKEQVYTSKLVRLC
KEDTAFNSYVEVPIGCERNGVEYRLLQAAYLSKAGAVLGRTLGVRPDDDLLFTVFSKGQKRKMKSLDESA
LCIFILKQINDRIKDRLQSCYRGEGTLDLAWLKVKDIPCSSALLTIDDNFCGLDMNAPLGVSEMVRGIPV
FTEDRDRMTSVIAYVYKNHSLAFVGTKSGKLKKIRVDGPKGNALQYETVQVVDSGPVLRDMAFSKDHEQL
YIMSERQLTRVPVESCGQYRSCGECLGSGDPHCGWCVLHNTCTRKERCERSREPRRFASEMKQCVRLTVH
PNNISVSQYNVLLVLETYNVPELSAGVNCTFEDLSEMDGLVIGNQIQCYSPAAKEVPRIITENGDHHVVQ
LQLKSKETGMTFASTSFVFYNCSVHNSCLSCVESPYRCHWCKYRHVCTHDPNTCSFQEGRVKLPEDCPQL
LRVDKILVPVEVIKPITLKAKNLPQPQSGQRGYECILNIQGIEQRVPALRFNSSSVQCQNTSYSYEGMEI
NNLPVELTVVWNGHFNIDNPAQNKVYLYKCGAMRESCGLCLKADPDFECGWCQSPGQCTLRQHCPAHESR
WLELSGANSKCTNPRITEIIPVTGPREGGTKVTIRGENLGLEFRDIASHVKVAGVECSPLVDGYIPAEQI
VCEMGEAKPSQHAGFVEICVAVCRPEFMARSSQLYYFMTLTLADLKPNRGPMSGGTQVTITGTNLNAGSN
VVVMFGSQPCLFHRRSPSYIICNTTSSEEVLDMKVTVQVDRARIRQDLVFQYVEDPTIVRIEPEWSIVSG
NTPIAVWGTHLDLIQNPQIRAKHGGKEHINICEVLNATEMTCQAPALALGPDHQSDLTERPEEFGFILDN
VQSLLILNKTNFTYYPNPVFEAFSPSGILELKPGTPIILKGKNLIPPVAGGNVKLNYTVLVGEKPCTVTV
SDVQLLCESPNLIGRHKVMARVGGMEYSPGMVYIAPDSPLSLPAIVSIAVAGGLLIIFIVAVLIAYKRKS
RESDLTLKRLQMQMDNLESRVALECKEAFAELQTDIHELTSDLDGAGIPFLDYRTYTMRVLFPGIEDHPV
LRDLEVPGYRQERVEKGLKLFAQLINNKVFLLSFIRTLESQRSFSMRDRGNVASLIMTVLQSKLEYATDV
LKQLLADLIDKNLESKNHPKLLLRRTESVAEKMLTNWFTFLLYKFLKECAGEPLFSLFCAIKQQMEKGPI
DAITGEARYSLSEDKLIRQQIEYKTLVLSCVSPDNVNSPEVPVKILNCDTITQVKEKILDAIFKNVPCSH
RPKAADMDLEWRQGSGARMILQDEDITTKIENDWKRLNTVAHYQVPDGSVVALVSKQVTAYNAVNNSTVS
RTSASKYENMIRYTGSPDSLRSRTPMITPDLESGVKLWHLVKNHEHGDQKEGDRGSKMVSEIYLTRLLAT
KGTLQKFVDDLFETIFSTAHRGSALPLAIKYMFDFLDEQADKHGIHDPHVRHTWKSNCLPLRFWVNMIKN
PQFVFDIHKNSITDACLSVVAQTFMDSCSTSEHRLGKDSPSNKLLYAKDIPSYKNWVERYYSDIGKMPAI
SDQDMNAYLAEQSRMHMNEFNTMSALSEIFSYVGKYSEEILGPLDHDDQCGKQKLAYKLEQVITLMSLDS

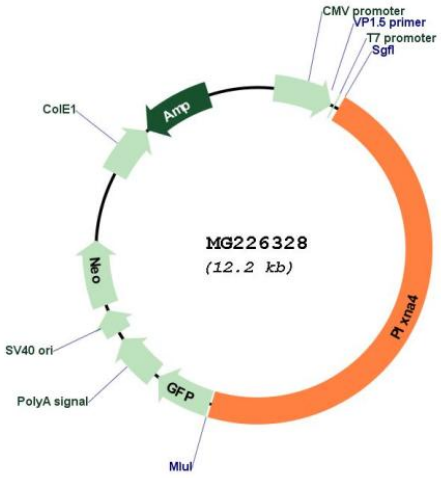
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_175750

ORF Size: 5670 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
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_175750.3, NP_786926.2
RefSeq Size:	12602 bp
RefSeq ORF:	5682 bp
Locus ID:	243743
UniProt ID:	Q80UG2
Cytogenetics:	6 A3.3
Gene Summary:	Coreceptor for SEMA3A. Necessary for signaling by class 3 semaphorins and subsequent remodeling of the cytoskeleton. Plays a role in axon guidance in the developing nervous system. 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]