

Product datasheet for **RC206375**

Plexin A4 (PLXNA4) (NM_181775) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plexin A4 (PLXNA4) (NM_181775) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plexin A4
Synonyms:	FAYV2820; PLEXA4; PLXNA4A; PLXNA4B; PRO34003
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC206375 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAAGCCATGCCTGGAAGTGGACCTGCCTTCTCTCCACCTCCTCATGGTGGGCATGGGCTCCTCCA
 CTTTGCTCACCCGGCAGCCAGCCCCGCTGTCCAGAAGCAGCGGTCATTTGTACATTCCGAGGAGAGCC
 CGCCGAGGGTTTCAATCACCTGGTGGTGGATGAGAGGACAGGACACATTTACTTGGGGCCGTCAATCGG
 ATTTACAAGTCTCCAGCGACCTGAAGGTCTTGGTGACGCATGAGACAGGGCCGGACGAGGACAACCCCA
 AGTGTACCCACCCCGCATCGTCCAGACCTGCAATGAGCCCTGACCACCACCAACAATGTCAACAAGAT
 GCTCCTCATAGACTACAAGGAGAACAGGCTGATTGCCTGTGGGAGCCTGTACCAAGGCATCTGCAAGCTG
 CTGAGGCTGGAGACCTTTCAAGCTGGGGAGCCTTATCATAAGAAGGAGCACTATCTGTCAGGTGTCA
 ACGAGAGCGGCTCAGTCTTTGGAGTGATCGTCTCCTACAGCAACCTGGATGACAAGCTGTTCAATGCCAC
 GGCAGTGGATGGGAAGCCGAGTATTTCCACCATCTCCAGCCGAAACTGACCAAGAACTCTGAGGCG
 GATGGCATGTTCCGCTAGTCTTCCATGATGAGTTCGTGGCCTCGATGATTAAGTCCCTTCGGACACCT
 TCACCATCATCCCTGACTTTGATATCTACTATGTCTATGGTTTTAGCAGTGGCAACTTTGTCTACTTTTT
 GACCCTCCAACCTGAGATGGTGTCTCCACCAGGCTCCACCACCAAGGAGCAGGTGTATACATCCAAGCTC
 GTGAGGCTTTGCAAGGAGGACACAGCCTTCAACTCCTATGTAGAGGTGCCATTGGCTGTGAGCGCAGTG
 GGGTGGAGTACCGCTGCTGCAGGCTGCCTACCTGTCCAAAGCGGGGGCCGTGCTTGGCAGGACCCTTGG
 AGTCCATCCAGATGATGACCTGCTTCCACCGTCTTCCAAAGGCCAGAAGCGGAAAATGAAATCCCTG
 GATGATCGGCCCTGTGCATCTTCACTTGAAGCAGATAAATGACCGCATTAAAGGAGCGGCTGCAGTCTT
 GTTACCAGGGCGAGGGCAGCCTGGACCTGGCTCAAGGTGAAGGACATCCCTGCAGCAGTGGCCT
 CTTAACCATTTGAGATAACTTCTGTGGCCTGGACATGAATGCTCCCTGGGAGTGTCCGACATGGTGCCT
 GGAATTCCTGCTTACCGAGGACAGGGACCGCATGACGTCTGTGTCATCGCATATGTCTACAAGAACCACT
 CTCTGGCCTTTGTGGCACCAAAAGTGGCAAGCTGAAGAAGTCTTCGGCACAGGTCCACAAGCGGGAAT
 CACCCAGGAGTGGATTGGAGTGGCGGGAGACCCACCTGGGGCGAACATTGCTTCTCAGGAACAGATGCTG
 TGTGTGTATCTTCAAGTCAAGTCAAAAGCAATATCAGATCAGAGAGTCCAGCCTCTGCTTTGTTGCT
 TCCTAAATGTACCTGGGAATTCTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206375 protein sequence
 Red=Cloning site Green=Tags(s)

MKAMPWNWTCLLSHLLMVGMSSTLLTRQPAPLSQKQRSFVTRFGEPAEGFNHLVVDERTGHIYLGAVNR
 IYKLSDDLKVLVTHETGPEDNPKCYPPRIVQTCNEPLTTTNNVNKMLLDYKENRLIACGSLYQGIKCL
 LRLEDLFLKGEFYHKKEHYLSGVNESGSVFGVIVSYSNLDDKLFIAATVDGKPEYFPTISSRKLTKNSEA
 DGMFAYVFHDEFVSMIKIPSDFTIIPDFDIYVYGFSSGNFVYFLTLQPEMVSPPGSTTKEQVYTSKL
 VRLCKEDTAFNSYVEVPIGCERSGVEYRLLQAAYLSKAGAVLGRTLGVHPDDLLFTVFSKGQKRKMKSL
 DESALCIFILKQINDRIKERLQSCYRGEGLDLAWLKVKDIPCSSALLTIDNFCGLDMNAPLGVSDMVR
 GIPVFTEDRDRMTSVIAYVYKNHSLAFVGTSGKLLKKSFGTGPQGGITQEWIGVAGDPPGANIASQEOML
 CVYLQCSSHKAISDQRVQPLLCFLNVPGNSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6319_f05.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_181775

ORF Size: 1566 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_181775.2](#), [NP_861440.1](#)

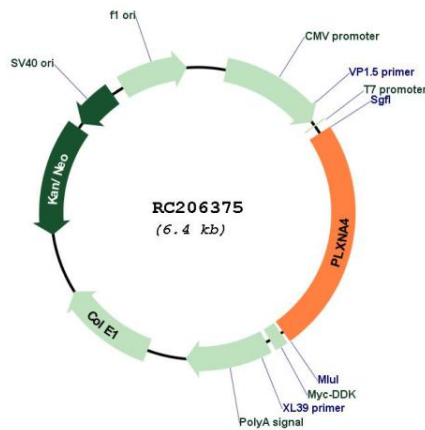
RefSeq Size: 2020 bp

RefSeq ORF: 1569 bp

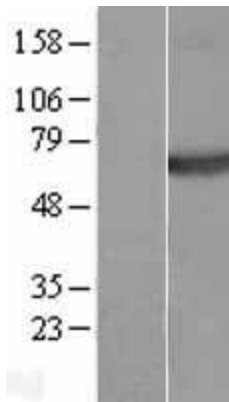
Locus ID: 91584

UniProt ID: [Q9HCM2](#)
Cytogenetics: 7q32.3
Protein Families: Druggable Genome
MW: 58.1 kDa
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 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC206375



Western blot validation of overexpression lysate (Cat# [LY405629]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206375 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).