

## Product datasheet for **RC225843**

### Plexin A4 (PLXNA4) (NM\_001105543) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Plexin A4 (PLXNA4) (NM_001105543) 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)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC225843 representing NM\_001105543  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAAGCCATGCCCTGGAAGTGGACCTGCCTTCTCTCCACCTCCTCATGGTGGGCATGGGCTCCTCCA  
 CTTTGCTACCCGGCAGCCAGCCCCGCTGTCCAGAAGCAGCGGTCATTTGTACATTCCGAGGAGAGCC  
 CGCCGAGGGTTTCAATCACCTGGTGGTGGATGAGAGGACAGGACACATTTACTTGGGGCCGTCATTCGG  
 ATTTACAAGTCTCCAGCGACTGAAGGTCTTGGTGACGCATGAGACAGGGCCGACGAGGACAACCCCA  
 AGTGTACCCACCCGCATCGTCCAGACCTGCAATGAGCCCTGACCACCACCAACAATGTCAACAAGAT  
 GCTCCTCATAGACTACAAGGAGAACAGGCTGATTGCCTGTGGGAGCCTGTACCAAGGCATCTGCAAGCTG  
 CTGAGGCTGGAGACCTTTCAAGCTGGGGAGCCTTATCATAAGAAGGAGCACTATCTGTCAGGTGTCA  
 ACGAGAGCGGCTCAGTCTTTGGAGTGATCGTCTCCTACAGCAACCTGGATGACAAGCTGTTCAATGCCAC  
 GGCAGTGGATGGGAAGCCGAGTATTTCCACCATCTCCAGCCGAAACTGACCAAGAACTCTGAGGCG  
 GATGGCATGTTCCGCTAGTCTTCCATGATGAGTTCGTGGCCTCGATGATTAAGATCCCTTCGGACACCT  
 TCACCATCATCCCTGACTTTGATATCTACTATGTCTATGGTTTTAGCAGTGGCAACTTTGTCTACTTTTT  
 GACCCTCCAACCTGAGATGGTGTCTCCACCAGGCTCCACCACCAAGGAGCAGGTGTATACATCCAAGCTC  
 GTGAGGCTTTGCAAGGAGGACACAGCCTTCAACTCCTATGTAGAGGTGCCATTGGCTGTGAGCGCAGTG  
 GGGTGGAGTACCGCTGCTGCAGGCTGCCTACCTGTCCAAAGCGGGGGCCGTGCTTGGCAGGACCCTTGG  
 AGTCCATCCAGATGATGACCTGCTTCCACCGTCTTCCAAAGGCCAGAAGCGGAAAATGAAATCCCTG  
 GATGAGTCGGCCCTGTGCATCTTCATCTTGAAGCAGATAAATGACCGCATTAAAGGAGCGGCTGCAGTCTT  
 GTTACCAGGCGAGGCGACGCTGGACCTGGCTGGCTCAAGGTGAAGGACATCCCTGCAGCAGTGGCCT  
 CTTAACCATTTGACGATAACTTCTGTGGCCTGGACATGAATGCTCCCTGGGAGTGTCCGACATGGTGCCT  
 GGAATTCCTGCTTACCGAGGACAGGGACCGCATGACGTCTGTCATCGCATATGTCTACAAGAACCACT  
 CTCTGGCCTTTGTGGCACAAAAGTGGCAAGCTGAAGAAGATGCCTGGTACCAGCCTCTGCCCTACCTT  
 TGAGCTACAGACGGGACCCCGATCCACAGAGCAACAGTACTCTGGAACCTCTGTTCTCCAGCTGTTCA  
 TCAAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC225843 representing NM\_001105543  
 Red=Cloning site Green=Tags(s)

MKAMPWNWTCLLSHLLMVGMSSTLLTRQPAPLSQKQRSFVTFRGEPAEGFNHLVVDERTGHIYLGAVNR  
 IYKLSDDLKVLVTHETGPDENPKCYPPRIVQTCNEPLTTNNVNMKMLLDYKENRLIACGSLYQIGCKL  
 LRLEDLFLKLGEPYHKKEHYLSGVNESGSVFGVIVSYSNLDDKLFIAATAVDGKPEYFPTISSRKLTKNSEA  
 DGMFAYVFHDEFVASMIIKIPSDFTIIPDFDIYVYGFSSGNFVYFLTLQPEMVSPPGSTTKEQVYTSKL  
 VRLCKEDTAFNSYVEVPIGCERSGVEYRLLQAAYLSKAGAVLGRTLGVHPDDLLFTVFSKGQKRKMKSL  
 DESALCIFILKQINDRIKERLQSCYRGEGLDLAWLKVKDIPCSSALLTIDDNFCGLDMNAPLGVSDMVR  
 GIPVFTEDRDRMTSVIAYVYKNHSLAFVGTSGKLLKMPGTSLCPTLELQTGPRSHRATVTLELLFSSCS  
 SN

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg3945\\_a01.zip](https://cdn.origene.com/chromatograms/mg3945_a01.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001105543

**ORF Size:** 1476 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\\_001105543.2](#)

**RefSeq ORF:** 1479 bp

**Locus ID:** 91584

**UniProt ID:** [Q9HCM2](#)

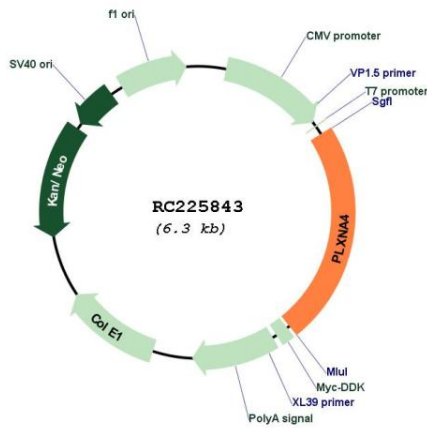
**Cytogenetics:** 7q32.3

**Protein Families:** Druggable Genome

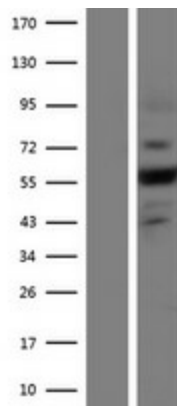
**MW:** 54.9 kDa

**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 RC225843



Western blot validation of overexpression lysate (Cat# [LY426261]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225843 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).