

Product datasheet for **RG225843**

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:	TurboGFP
Symbol:	PLXNA4
Synonyms:	FAYV2820; PLEXA4; PLXNA4A; PLXNA4B; PRO34003
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG225843 representing NM_001105543
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAAGCCATGCCCTGGAAGTGGACCTGCCTTCTCTCCACCTCCTCATGGTGGGCATGGGCTCCTCCA
 CTTTGCTACCCCGCAGCCAGCCCCGCTGTCCAGAAAGCAGCGGTCATTTGTACATTCCGAGGAGAGCC
 CGCCGAGGGTTTCAATCACCTGGTGGTGGATGAGAGGACAGGACACATTTACTTGGGGCCGTCAATCGG
 ATTTACAAGTCTCCAGCGACCTGAAGGTCTTGGTGACGCATGAGACAGGGCCGACGAGGACAACCCCA
 AGTGTACCCACCCCGCATCGTCCAGACCTGCAATGAGCCCTGACCACCACCAACAATGTCAACAAGAT
 GCTCCTCATAGACTACAAGGAGAACAGGCTGATTGCCTGTGGGAGCCTGTACCAAGGCATCTGCAAGCTG
 CTGAGGCTGGAGACCTTTCAAGCTGGGGAGCCTTATCATAAGAAGGAGCACTATCTGTCAGGTGTCA
 ACGAGAGCGGCTCAGTCTTTGGAGTGATCGTCTCCTACAGCAACCTGGATGACAAGCTGTTCAATGCCAC
 GGCAGTGGATGGGAAGCCGAGTATTTCCACCATCTCCAGCCGAAACTGACCAAGAACTCTGAGGCG
 GATGGCATGTTCCGCTAGTCTTCCATGATGAGTTCGTGGCCTCGATGATTAAGATCCCTTCGGACACCT
 TCACCATCATCCCTGACTTTGATATCTACTATGTCTATGGTTTTAGCAGTGGCAACTTTGTCTACTTTTT
 GACCCTCCAACCTGAGATGGTGTCTCCACCAGGCTCCACCACCAAGGAGCAGGTGTATACATCCAAGCTC
 GTGAGGCTTTGCAAGGAGGACACAGCCTTCAACTCCTATGTAGAGGTGCCATTGGCTGTGAGCGCAGTG
 GGGTGGAGTACCGCTGCTGCAGGCTGCCTACCTGTCCAAAGCGGGGGCCGTGCTTGGCAGGACCCTTGG
 AGTCCATCCAGATGATGACCTGCTTCCACCGTCTTCCAAAGGCCAGAAGCGGAAAATGAAATCCCTG
 GATGAGTCGGCCCTGTGCATCTTCACTTGAAGCAGATAAATGACCGCATTAAAGGAGCGGCTGCAGTCTT
 GTTACCGGGCGAGGGCAGCTGGACCTGGCTCAAGGTGAAGGACATCCCCTGCAGCAGTGGCCT
 CTTAACCAATTGACGATAACTTCTGTGGCCTGGACATGAATGCTCCCTGGGAGTGTCCGACATGGTGGCT
 GGAATTCCTGCTTACCGAGGACAGGGACCGCATGACGTCTGTGCATCGCATATGTCTACAAGAACCACT
 CTCTGGCCTTTGTGGCACAAAAGTGGCAAGCTGAAGAAGATGCCTGGTACCAGCCTCTGCCCTACCCT
 TGAGCTACAGACGGGACCCCGATCCACAGAGCAACAGTACTCTGGAACCTCTGTTCTCCAGCTGTTCA
 TCAAAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG225843 representing NM_001105543
 Red=Cloning site Green=Tags(s)

MKAMPWNWTCLLSHLLMVGMSSTLLTRQPAPLSQKQRSFVTFRGEPAEGFNHLVVDERTGHIYLGAVNR
 IYKLSDDLKVLVTHEETGPDEDNPKCYPPRIVQTCNEPLTTNNVNMKMLLDYKENRLIACGSLYQGIKCL
 LRLEDLFLKLGEPYHKKEHYLSGVNESGSVFGVIVSYSNLDKLFIAATVDGKPEYFPTISSRKLTKNSEA
 DGMFAYVFHDEFVASMILIPSDFTIIPDFDIYVYGFSSGNFVYFLTLQPEMVSPPGSTTKEQVYTSKL
 VRLCKEDTAFNSYVEVPIGCERSGVEYRLLQAAYLSKAGAVLGRTLGVHPDDLLFTVFSKGQKRKMKS
 DESALCIFILKQINDRIKERLQSCYRGEGLDLAWLKVKDIPCSSALLTIDDNFCGLDMNAPLGVSDMVR
 GIPVFTEDRDRMTSVIAYVYKNHSLAFVGTSGKLLKMPGTSLCPTLELQTGPRSHRATVTELELFFSSCS
 SN

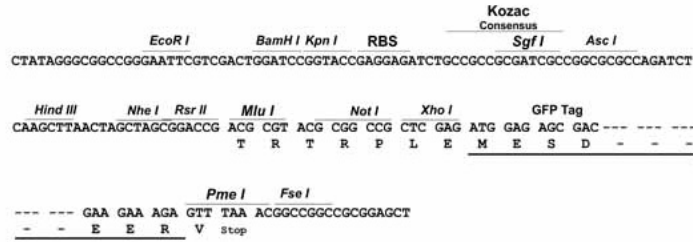
TRTRPLE – GFP Tag – V

Restriction Sites:

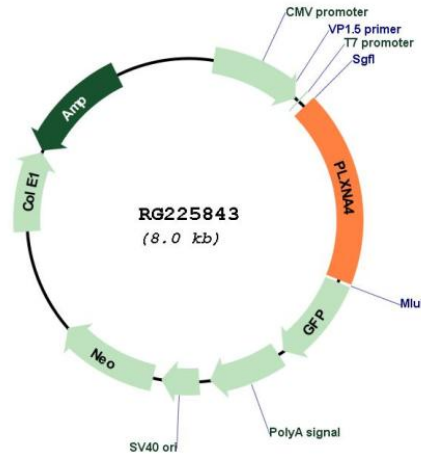
Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



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.

RefSeq: [NM_001105543.2](#)

RefSeq Size: 3408 bp

RefSeq ORF: 1479 bp

Locus ID: 91584

UniProt ID: [Q9HCM2](#)

Cytogenetics: 7q32.3

Protein Families: Druggable Genome

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]