

Product datasheet for **RR205740**

Aplnr (NM_031349) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Aplnr (NM_031349) Rat Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: Aplnr
 Synonyms: Agtrl1; Apj
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >RR205740 representing NM_031349
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAAGATGATGGTTACAACACTACGGGGCTGACAACCAAGTCTGAATGTGACTACGCAGACTGGACGC
 CCTCTGGAGCTCTCATCCCTGCCATCTACATTCTGGTTTTCTTCTAGGCACCACAGGCAATGGCCTGGT
 GCTCTGGACCGTGTGGAGCAGCCGAGAAAAGAGACGCTCAGCTGACATCTTCATTGCCAGCCTGGCT
 GTGGCTGACTTGACCTTTGTGGTGACTTTGCCACTGTGGGCCACTTATACCTACCGGGAGTTTGACTGGC
 CTTTTGGAACCTTCTCTTGAAGCTCAGCAGCTACCTCATCTTTGTCAACATGTACGCCAGTGTCTTTTG
 CCTCACCGGCCTCAGCTTTGACCGATACCTGGCCATTGTGAGGCCAGTGGCTAACGCTCGACTAAGGCTG
 CGAGTCAGCGGGCCGTGGCCACAGCAGTCTTGTGGGTGCTGGCTGCCCTTCTAGCTGTGCCCGTCATGG
 GTTCCGTTCCACTGACATCCCAGAAAACAGCACAAGACCCAGTGTACATGGACTACTCTATGGTGGC
 CACTTCAAACCTCAGAGTGGGCTGGGAGGTGGGCTTGGGGTGTCTCCACTGCTGTGGGCTTTGTGGT
 CCCTTCATCATCATGCTGACCTGTTACTTCTTTCATTGCCCAAACCATCGCTGGCCATTTCCGAAAGGAGC
 GCATCGAGGGCCTGCGGAAGAGGCGCCGGCTGCTGAGCATCATCGTGGTGTGGTGGTACCTTTGCCCT
 GTGCTGGATGCCTTACCACCTGGTGAAGACTCTACATGCTGGGCAATTTGCTGCACTGGCCCTGTGAC
 TTTGACAGCTTCTCATGAATGTCTTTCCCTATTGCACCTGCATCAGTTACGTCAACAGCTGCCTCAACC
 CCTTCTCTATGCCTTCTTTGACCCCGATTTGCGCCGAGCTGCACCTCCATGCTCTGTGTGACCCAGAG
 CGGGTGCAAAGGCAGCCCTCACAGCAGCAGTGCAGAGAAATCTGCCAGTTATTCTTCTGGGCACAGCCAG
 GGCCCCGGCCCCAACATGTGCAAGGGAGGAGAACCAGTGCATGAGAAATCTATCCCTATAGCCAAGAAA
 CCCTTGTGGAC

ACGCGTACGCGGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR205740 representing NM_031349
Red=Cloning site Green=Tags(s)

MEDDGYNYGGADNQSECDYADWTPSGALIPAIIYLVLFLGTTGNGLVLWTVFSSREKRRSADIFIASLA
 VADLTFVVTLPLWATYTYREFDWPFGTF SCKLSSYLIFVNMYSVFCLTGLSFDLYLAIVRPVANARLRL
 RVSGAVATAVLWVLAALLAVPVMVFRSTDIPENSTKTQC YMDYSMVATSNSEWAVEVGLGVSSTAVGFVV
 PFIIMLT CYFFIAQTIAGHFRKERIEGLRKRRLLSIIIVLVVTFALCWMPYHLVKTLYMLGNLLHWPCD
 FDSFLMNVFPYCTCISYVNSCLNPFLYAFFDPRFRRACTSMLCCDQSGCKGSPHSSSAEKSASYSSGHSQ
 GPGPNMCKGGEPMEKSI PYSQETLVD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2111_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031349

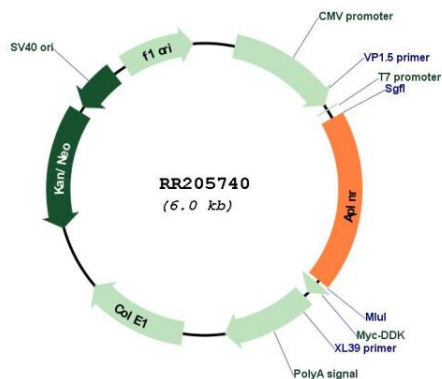
ORF Size: 1131 bp

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:	<ol style="list-style-type: none">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_031349.2 , NP_112639.1
RefSeq Size:	3670 bp
RefSeq ORF:	1134 bp
Locus ID:	83518
UniProt ID:	Q9JHG3
Cytogenetics:	3q24
MW:	42.8 kDa
Gene Summary:	Receptor for apelin receptor early endogenous ligand (APELA) and apelin (APLN) hormones coupled to G proteins that inhibit adenylate cyclase activity (PubMed:11359874). Plays a key role in early development such as gastrulation, blood vessels formation and heart morphogenesis by acting as a receptor for APELA hormone. May promote angioblast migration toward the embryonic midline, i.e. the position of the future vessel formation, during vasculogenesis. Promotes sinus venosus (SV)-derived endothelial cells migration into the developing heart to promote coronary blood vessel development. Plays also a role in various processes in adults such as regulation of blood vessel formation, blood pressure, heart contractility and heart failure (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR205740