

## Product datasheet for MR205867

### Aplnr (NM\_011784) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Aplnr (NM_011784) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aplnr
Synonyms:	Agtrl1; APJ; msr/apj
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205867 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGATGATGGTTACAACACTACTATGGGGCTGACAACCACTGCTGAATGCGACTACGCAGACTGGAAGC  
CCTCTGGAGCGCTCATTCTGCCATCTACATGTTGGTTTTCTTCTAGGCACCACAGGCAATGGCCTGGT  
GCTCTGGACCGTGTTCGAACCAAGCGCGAAAAGAGACGCTCAGCTGACATCTTCATTGCCAGCCTGGCA  
GTGGCTGACTTGACCTTTGTGGTGACTTTGCCACTGTGGGCCACTTATACCTACCGGGAGTTTGACTGGC  
CTTTTGGAACTTCTCTTGAAGCTCAGCAGCTACCTCATCTTTGTCAACATGTACGCCAGTGTCTTTTG  
CCTCACCGGCCTCAGCTTTGACCGATACCTGGCCATTGTGAGCCGGTGGCCAATGCTCGGCTAAGGCTG  
CGAGTCAGCGGGCCGTGGCCACAGCAGTCTTATGGGTGCTGGCTGCCCTTCTAGCTGTGCTGTATGG  
TGTTCCGTTCCACAGACGCCCTCGAAAAATGGCACCAAGATCCAGTGCTACATGGACTACTCTATGGTGGC  
CACTTCAAACCTCAGAGTGGGCTGGGAGGTGGGCTTGGGGTGTCTCCACTGCCGTGGGCTTTGTGGTG  
CCCTTCACCATCATGCTGACATGTTACTTCTTATTGCCCAAACCATCGCTGGCCATTTCCGAAAGGAGC  
GCATTGAGGGCCTGCGGAAGAGGCGCCGGCTGCTCAGCATTATCGTGGTGCTTGTAGTGACCTTTGCCCT  
GTGCTGGATGCCTTACCACCTGGTGAAGACTCTACATGCTGGGCAGTTTGTGCACTGGCCCTGTGAC  
TTTGACATCTTCTCATGAATGTCTTTCCGTAAGTGCACCTGCATCAGTTATGTCAACAGCTGCCTCAACC  
CCTTTCTATGCCTTCTTTGACCCCGATTTCCGCAAGCTGCACCTCCATGCTCTGTGTGATCAGAG  
CGGGTGCAAAGGCACCCCTCACAGCAGTAGTGCCGAGAAGTCAGCCAGTTATTCTCCGGGCACAGCCAG  
GGCCCTGGCCCAACATGGGAAAGGGAGGAGAGCAGATGCATGAGAAATCGATTCCCTATAGTCAAGAAA  
CCCTTGTGGAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR205867 protein sequence  
 Red=Cloning site Green=Tags(s)

MEDDGYNYGGADNQSECDYADWKPSGALIPAIYMLVFLGTTGNGLVLWTVFRTSREKRRSADIFIASLA  
 VADLTFVVTLPWATYTYREFDWPFGTFCKLSSYLIFVNMYSVFLCTGLSFDLYLAIVRPVANARLRL  
 RVSGAVATAVLWVLAALLAVPVMVFRSTDAENGTKIQC YMDYSMVATSNSEWAVEVGLGVSSTAVGFVV  
 PFTIMLTCYFFIAQTIAGHFRKERIEGLRKRRLLSIIIVLVVTFALCWMPYHLVKTLYMLGSLHWP  
 CD FDIFLMNVFPYCTCISYVNSCLNPFLYAFFDPRFRQACTSMLCCDQSGCKGTPHSSSAEKSASYS  
 SGHSQ GPGPNMGKGGEQMHEKSIPYSQETLVD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_011784

**ORF Size:** 1134 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\\_011784.2](#), [NP\\_035914.1](#)

**RefSeq Size:** 3573 bp

**RefSeq ORF:** 1134 bp

**Locus ID:** 23796

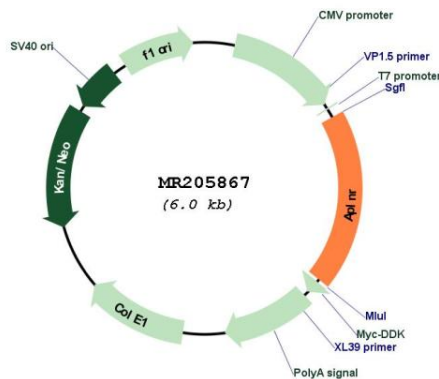
**UniProt ID:** [Q9WV08](#)

**Cytogenetics:** 2 D

**MW:** 42.3 kDa

**Gene Summary:** Receptor for apelin receptor early endogenous ligand (APELA) and apelin (APLN) hormones coupled to G proteins that inhibit adenylate cyclase activity. Plays a key role in early development such as gastrulation, blood vessels formation and heart morphogenesis by acting as a receptor for APELA hormone (PubMed:28854362, PubMed:28890073, PubMed:28663440). May promote angioblast migration toward the embryonic midline, i.e. the position of the future vessel formation, during vasculogenesis (By similarity). Promotes sinus venosus (SV)-derived endothelial cells migration into the developing heart to promote coronary blood vessel development (PubMed:28890073). Plays also a role in various processes in adults such as regulation of blood vessel formation, blood pressure, heart contractility and heart failure (PubMed:28371822).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR205867