

## Product datasheet for RN205740

### Aplnr (NM\_031349) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Aplnr (NM_031349) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Aplnr
Synonyms:	Agtrl1; Apj
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN205740 representing NM_031349 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGATGATGGTTACAACACTACGGGGCTGACAACCAAGTCTGAATGTGACTACGCAGACTGGACGC  
CCTCTGGAGCTCTCATCCCTGCCATCTACATTCTGGTTTTCTTCTAGGCACCACAGGCAATGGCCTGGT  
GCTCTGGACCGTGTGGAGCAGCCGAGAAAAGAGACGCTCAGCTGACATCTTCATTGCCAGCCTGGCT  
GTGGCTGACTTGACCTTTGTGGTACTTTGCCACTGTGGGCCACTTATACCTACCGGGAGTTTGACTGGC  
CTTTTGGAACTTCTCTTGAAGCTCAGCAGCTACCTCATCTTTGTCAACATGTACGCCAGTGTCTTTTG  
CCTCACCGGCCTCAGCTTTGACCGATACCTGGCCATTGTGAGGCCAGTGGCTAACGCTCGACTAAGGCTG  
CGAGTCAGCGGGCCGTGGCCACAGCAGTCTTGTGGTGTGGCTGCCCTTCTAGCTGTGCCCGTCATGG  
TGTTCCGTTCCACTGACATCCCAGAAAACAGCACAAGACCCAGTGTACATGGACTACTCTATGGTGGC  
CACTTCAAACCTCAGAGTGGGCTGGGAGGTGGGCTTGGGGTGTCTCCACTGCTGTGGGCTTTGTGGT  
CCCTTCATCATCATGCTGACCTGTTACTTCTTTCATTGCCCAAACCATCGCTGGCCATTTCCGAAAGGAGC  
GCATCGAGGGCCTGCGGAAGAGGCGCCGGCTGCTGAGCATCATCGTGGTGTGGTGGTACCTTTGCCCT  
GTGCTGGATGCCTTACCACCTGGTGAAGACTCTACATGCTGGCAATTTGCTGCACTGGCCCTGTGAC  
TTTGACAGCTTCTCATGAATGTCTTTCCCTATTGCACCTGCATCAGTTACGTCAACAGCTGCCTCAACC  
CCTTCTCTATGCCTTCTTTGACCCCGATTTGCGCCGAGCCTGCACCTCCATGCTCTGTGTGACCCAGAG  
CGGGTGCAAAGGAGCCCTCACAGCAGCAGTGCAGAGAAATCTGCCAGTTATTCTTCTGGGCACAGCCAG  
GGCCCCGGCCCCAACATGTGCAAGGGAGGAGAACCAGTGCATGAGAAATCTATCCCTATAGCCAAGAAA  
CCCTTGTGGACTAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Chromatograms:	<a href="https://cdn.origene.com/chromatograms/ja2454_c03.zip">https://cdn.origene.com/chromatograms/ja2454_c03.zip</a>
Restriction Sites:	Sgfl-Mlul
ACCN:	NM_031349
Insert Size:	1134 bp
OTI Disclaimer:	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
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"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
RefSeq:	<a href="#">NM_031349.2</a> , <a href="#">NP_112639.1</a>
RefSeq Size:	3670 bp
RefSeq ORF:	1134 bp
Locus ID:	83518
UniProt ID:	<a href="#">Q9JHG3</a>
Cytogenetics:	3q24

**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]