

Product datasheet for **RR203391**

Arcn1 (NM_001007662) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arcn1 (NM_001007662) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Arcn1
Synonyms:	MGC94158
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR203391 representing NM_001007662
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGTCTGTGGCGGCAGCGGTCTGCACGAAAGCGGAAAGGCAATTGTTTCTCGACAGTTTGTGGAGA
 TGACCCGAACTCGGATTGAGGGTTATTAGCAGCTTCCCAAACCTCATGAACACTGAAAAACAACATAC
 TTTTGTGAAACAGAAAGTGAAGATATGTCTACCAACCTATGGAGAACTGTACATGGTATTGATCACT
 ACAAAAAACAGCAATATCTTAGAAGATTGGAGACTCTACGGCTTCTCAAGGGTGATCCCTGAATATT
 GCCGAGCCTTAGAAGAAAATGAAATATCTGAGCACTGTTTTGATTTGATTTTGTCTTTGATGAAATTGT
 TGCCCTGGGATACCGGGAGAATGTTAACCTGGCACAGATCAGAAGTTTACAGAAATGGACTCTCATGAG
 GAGAAAGTATTCAGAGCAGTCAGAGAGACTCAAGAAGCTGAAGCTAAAGCTGAAATGCGGCGTAAAGCAA
 AGGAATTACAACAGGCCCGGAGAGACCGGAGAGACAGGAAAGAAAGCACCAGGATTTGGGGGATTTGG
 TAGTTCTGCAGTGTCTGGAGGCAGCACAGCAGCCATGATCACAGAGACTATCATTGAAACTGATAAACCA
 AAAGTGGCACCCGACCCAGCCAGACCTTACGGCCCGCAAGGCTTTGAAACTTGGAGCTAAAGGAAAGG
 AAGTAGATAACTTTGTGGACAACTGAAATCTGAAGGCGAACTATTATGTCTTCTAACATGGGGAAAGCG
 CACCTCGGAAGCAGCCAAAGTGCATGCTCCACCCATTAATATGAAAAGTGTGCATATGAAGATTGAAGAA
 AAGATCACACTGACCTGTGGGAGAGATGGAGGATTACAGAATA TGGAGTTGCATGGCATGATCATGCTTA
 GGATCTCAGATGACAAGTTTGGCCGGATTCTGCTTTCATGTAGAAAATGAAGATAAGAAAGGGGTGCAGCT
 GCAGACCCATCCAATGTGGATAAAAACTTTTTACTGCAGAGTCTCTCATTGGCTTGAAAAACCCAGAG
 AAGTCAATTTCCAGTCAACAGCGATGTAGGGTCTAAAGTGGAGACTACAACAACAGAGGAATCTTTTA
 TTCCTTTGACAATTAATTGCTGGCCTTCTGAAAAGTGGAAACGGCTGTGATGTCAACATAGAATGAAT
 ACAGGAAGATAATTTAGAGCTCAATGATGTGGTCAATCACCATCCCACTCCCATCGGGTGTGGTGCACCT
 GTGATCGGTGAGATCGATGGGGAATATCGACACGACAGTCGGAGAAATACCTTGGAGTGGTGCCTGCCAG
 TGATTGATGCCAAAAATAAGAGTGGCAGCCTGGAGTTCAGCATTCTGGGAGCCCAATGACTTCTTCCC
 TGTTCAAGTTTCTTTCATCTCCAAAAAGAATTACTGCAACATACAGGTTACCAAAGTGACCCAGGTAGAT
 GGAAACAGCCCTGTTAGGTTTTCCACAGAGACCACTTTCTTAGTGGACAAATATGAAATCTCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR203391 representing NM_001007662
 Red=Cloning site Green=Tags(s)

MVLLAAAVCTKAGKAIVSRQFVEMTRTRIEGLLAAPKLMNTGKQHTFVETESVRYVYQPMKLYMVLIT
 TKNSNILEDLETLRFLSRVIPEYCRALAEENEISEHCFDLIFAFDEIVALGYRENVNLAQIRTFTEMDSHE
 EKVFRAVRETQEREAKAEMRRKAKELQQARRDAERQKKAPGFGGSSAVSGGSTAAMITETIIETDKP
 KVAPARPSGSPSKALKLGAKEVDNFVDKLGSEGETIMSSNMGKRTSEAAKVHAPPINMESVHMKIEE
 KITLTCGRDGGGLQNMELHGMIMLRISDDKFGRIRLHVENEDKKGVLQTHPNVDKLLFTAESLIGLKNPE
 KSFVNSDVGVLKWLQTTESFIPLTINCWPSESGNGCDVNIYEYELQEDNLELNDVVITIPLPSGVGAP
 VIGEIDGEYRHSRRNTLEWCLPVIDAKNKSGSLEFSIPGQPNDFFPVQVSFISKKNYCNIQVTKVTQVD
 GNSPVRFTSTETFLVDKYEIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

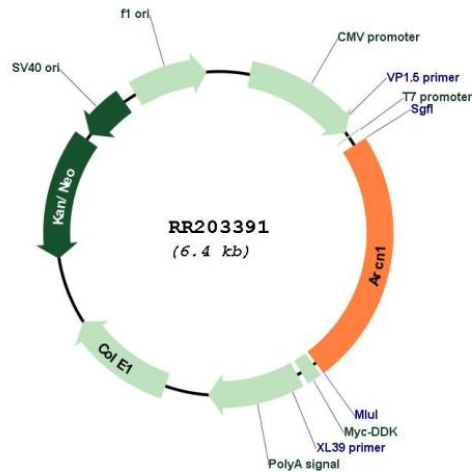
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001007662

ORF Size: 1533 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_001007662.1](#), [NP_001007663.1](#)

RefSeq Size: 3485 bp

RefSeq ORF: 1536 bp

Locus ID: 300674

UniProt ID: [Q66H80](#)

Cytogenetics: 8q22

MW: 57.2 kDa

Gene Summary: The coatomer is a cytosolic protein complex that binds to dilysine motifs and reversibly associates with Golgi non-clathrin-coated vesicles, which further mediate biosynthetic protein transport from the ER, via the Golgi up to the trans Golgi network. Coatomer complex is required for budding from Golgi membranes, and is essential for the retrograde Golgi-to-ER transport of dilysine-tagged proteins. In mammals, the coatomer can only be recruited by membranes associated to ADP-ribosylation factors (ARFs), which are small GTP-binding proteins; the complex also influences the Golgi structural integrity, as well as the processing, activity, and endocytic recycling of LDL receptors (By similarity).[UniProtKB/Swiss-Prot Function]