

Product datasheet for **MG208216**

Arcn1 (NM_145985) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arcn1 (NM_145985) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Arcn1
Synonyms:	4632432M07Rik; nur17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208216 representing NM_145985
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGTCTGTTGGCAGCAGCAGTCTGCACGAAAGCGGAAAGGCTATTGTTTCTCGACAGTTCGTGGAGA
 TGACCCGAACTCGGATTGAAGGCTTATTAGCAGCTTCCCAAACCTCATGAACACTGGAAAAACAACATAC
 TTTTGTTGAAACAGAGAGTGAAGATATGTGTACCAACCTATGGAGAACTGTACATGGTATTGATCACT
 ACAAAGAACAGCAATATCTTAGAAGATTGGAGACTTTAAGGCTTCTCAAGGGTGATCCCTGAATATT
 GCCGAGCCTTAGAGGAAATGAAATATCTGAGCACTGTTTTGATTTGATTTTGTCTTTGATGAAATTGT
 TGCCCTGGGATACCGGGAGAATGTTAACCTGGCACAGATCAGAACCTTACAGAAATGGACTCTCACGAG
 GAGAAAGTATCCGAGCAGTCAGAGAGACTCAAGAACGTGAGGCTAAGGCTGAGATGCGGCGTAAAGCAA
 AGGAATTACAACAGGCCCGAAGAGATGCAGAGAGACAGGGGAAAAAGCACCAGGATTTGGCGGATTTGG
 TAGTTCTGCAGTGTCTGGAGGCAGCACAGCAGCCATGATCACAGAGACTATCATTGAAACTGATAAACCA
 AAAGTGGCTCCTGCACCAGCCAGACCTTACGGCCCGCAAGGCTTTGAAACTTGGAGCTAAAGGAAAGG
 AAGTAGATAACTTTGTGGACAAATTGAAATCTGAAGGTGAACTATTATGTCTTCTAATATGGGAAAACG
 TACCTCAGAAGCAACAAAGTGCATGCTCCACCTATTAATATGAAAAGTGTGCACATGAAGATTGAAGAG
 AAGATCACACTAACCTGTGGGAGAGATGGAGGATTACAGAATA TGGAGTTGCATGGCATGATCATGCTTA
 GGATCTCAGATGACAAATTTGGCCGGATTCTGCTTTCATGTAGAAAATGAAGATAAGAAAGGGTGCAGCT
 ACAGACGCATCCAAATGTGGATAAAAACTTTTTACTGCAGAGTCTCTCATTGGCTTGAAAAACCCAGAG
 AAGTCATTTCCAGTCAACAGTGATGTAGGGTACTAAAGTGGAGACTACAACAACAGAGGAATCTTTTA
 TTCCGTTGACAATTAATTGCTGGCCTTCGGAAAGTGGAAATGGCTGTGATGTCAACATAGAGTACGAAT
 ACAGGAAGATAATTTAGAGCTCAATGATGTGTTATCACTATCCCACTCCCATCGGGTGTGGCGCGCCT
 GTGATTGGTGAGATCGATGGGGAATATCGACATGACAGTCGAGAGAAATACGTTGGAGTGGTGCCTGCCAG
 TGATTGATGCCAAAAATAAGAGTGGCAGCCTGGAGTTCAGCATTCTGGGACGCTAATGACTTCTTCCC
 TGTTCAAGTTTCTTTCATCTCCAAAAAGAATTACTGCAACATACAGGTTACCAAAGTGACCCAGGTGGAT
 GGAAACAGCCCCGTCAGGTTTTCCACGGAGACCACTTTCTTAGTGGACAAATACGAAATCCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG208216 representing NM_145985
 Red=Cloning site Green=Tags(s)

MVLLAAVCTKAGKAIIVSRQFVEMTRTRIEGLLAAPFKLMNTGKQHTFVETESVRYVYQPMKLYMVLIT
 TKNSNILEDLETLRFLSRVPEYCRAL EENEISEHCFDLIFAFDEIVALGYRENVNLAQIRTFTEMDSHE
 EKVFRAVRETQEREAKAEMRRKAKELQQARRDAERQGGKAPGFGGSSAVSGGTAAMITETIIETDKP
 KVAPAPARPSGSKALKLGAKGKEVDNFVDKLGSEGETIMSSNMGKRTSEATKVHAPPINMESVHMKIEE
 KITLTCGRDGGGLQNMELHGMIMLRISDDKFGRIRLHVENEDKKGVLQTHPNVDKLLFTAESLIGLKNPE
 KSFPVNSDVGVLKWRLQTTEESFIPLTINCWPSESGNGCDVNI EYELQEDNLELNDVVITIP LPSGVGAP
 VIGEIDGEYRHDSRRNTLEWCLPVIDAKNKSLSLEFSIPGQPNDFFPVQVSFISKKNYCNIQVTKVTQVD
 GNSPVRFSTETTF LVDKYEIL

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:

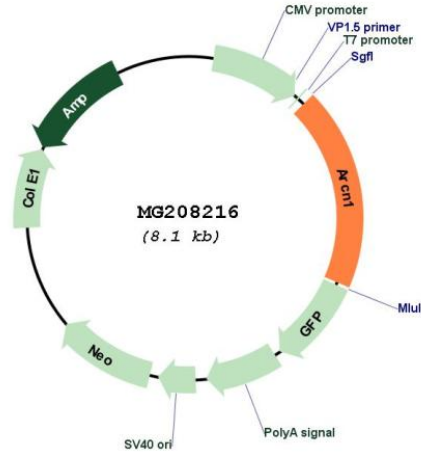


EcoR I *BamH I* *Kpn I* RBS *Kozac Consensus* *Sgf I* *Asc I*
 CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

Hind III *Nhe I* *Rsr II* *Mlu I* *Not I* *Xho I* GFP Tag
 CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---
 T R T R P L E M E S D - - -

Pme I *Fse I*
 --- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT
 - - E E R V Stop

Plasmid Map:



ACCN: NM_145985

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_145985.3](#), [NP_666097.2](#)

RefSeq Size: 4051 bp

RefSeq ORF: 1536 bp

Locus ID: 213827

UniProt ID: [Q5XJY5](#)

Cytogenetics: 9 A5.2

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]