

Product datasheet for **MG222964**

Arpc2 (NM_029711) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Arpc2 (NM_029711) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Arpc2
Synonyms: 34kDa; 2210023N03Rik; p34-Arc
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG222964 representing NM_029711
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATCCTGCTGGAGGTGAACAACCGCATCATCGAGGAGACGCTCGCGCTCAAGTTCGAGAACCGGCCCG
 CCGGAAACAAACCAGAAGCTGTAGAAGTAACATTTGCAGATTTTGATGGCGTCCTTTATCATATTTCAA
 TCCTAATGGAGACAAAACAAAAGTGATGGTCAGTATTTCTTTGAAATTCTACAAGAACTTCAGGCACAT
 GGAGCTGATGAGTTGTTAAAGAGAGTGTATGGGAGCTTCTTGGTAAATCCAGAACCAGGATATAATGTTT
 CTTTGCTATATGACCTGAAAAATCTACCTGCATCCAAGGATTCTATTGTGCATCAGGCTGGCATGTTGAA
 GCGAAATTGTTTTGCCTCTGTGTTTGAGAAATACTCCAATTCCAAGAAGAGGGCAAAGAAGGAGAGAAC
 AGAGCAGTTATCCATTATAGGGATGATGAGACCATGTATGTGGAATCTAAGAAAGACAGAGTCACAGTAG
 TCTTCAGCACGGTTTTTAAAGATGACGACGATGTGGTCATCGGAAAGGTGTTTCATGCAGGAGTTCAAAGA
 AGGACGAAGAGCCAGCCACACAGCCCCAGGTCTTTTCAGCCACAGGGAACCTCCTCTAGAGCTGAAA
 GACACAGATGCTGCTGTGGGTGACAACATTGGCTACATCACCTTTGTGCTGTTCCCTCGCCACACCAATG
 CCACTGCTCGAGACAACACCATCAACCTGATCCACAGTTCGGGACTATCTGCACTACCAATTAAGTG
 CTCTAAGGCCTATATTCATACACGAATGCGAGCAAAAACATCCGACTTCCCTTAAGGTGCTCAACCGTGCA
 CGCCCAGATGCCGAGAAAAAAGAATGAAAACAATCACGGGAAGACTTTTTTCATCCCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG222964 representing NM_029711
 Red=Cloning site Green=Tags(s)

MILLEVNNRIIEETLALKFENAAAGNKPEAVEVTFADFDGVLHYHISNPNGDKTKVMVSI SLKFYKELQAH
 GADELLKRVIYGSFLVNPEPGYNVSLLYDLENLPASKDSIVHQAGMLKRNCFA SVFEKYFQFQEEGKEGEN
 RAVIHYRDEDEMYVESKKDRVT VVFSTVFKDDDDV VIGKVF MQEFKEGRRASHTAPQVLF SHREPPLELK
 DTDAAVGDNIGYITFVLFPRHTNATARDNTINLIHTFRDYLHYHIKCSKAYIHTRMRAKTSDFLKVLNRA
 RPD AEKKEMKTI TGKTFSSR

TRTRPLE - GFP Tag - V

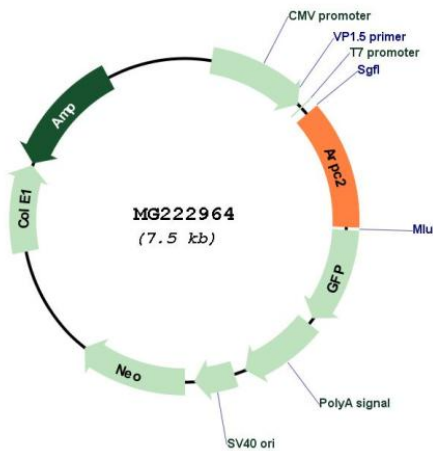
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_029711

ORF Size: 900 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:	<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_029711.2
RefSeq Size:	1597 bp
RefSeq ORF:	903 bp
Locus ID:	76709
UniProt ID:	Q9CVB6
Cytogenetics:	1 C3
Gene Summary:	Actin-binding component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility. Seems to contact the mother actin filament. In addition to its role in the cytoplasmic cytoskeleton, the Arp2/3 complex also promotes actin polymerization in the nucleus, thereby regulating gene transcription and repair of damaged DNA. The Arp2/3 complex promotes homologous recombination (HR) repair in response to DNA damage by promoting nuclear actin polymerization, leading to drive motility of double-strand breaks (DSBs).[UniProtKB/Swiss-Prot Function]