

## **Product datasheet for MG201582**

## Arpc3 (NM\_019824) Mouse Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Arpc3 (NM\_019824) Mouse Tagged ORF Clone

Tag: TurboGFP

Symbol: Arpc3

**Synonyms:** 1110006A04Rik; p21-Ar; p21-ARC; p21Arc

Mammalian Cell

Selection:

Neomycin

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG201582 representing NM\_019824

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCCGGCATACCACTCTTCTCTCATGGACCCGGACACCAAGCTCATCGGTAACATGGCCCTGTTGCCCC TCCGAAGCCAGTTCAAAGGACCCGCCCCTCGCGAGACCAAAGACACCGGACATTGTGGATGAAGCCATCTA CTACTTCAAGGCCAATGTCTTCTCAAGAACTATGAAATTAAGAATGAAGCGGACAGGACATTGATCTAC ATCACACTCTACATTTCTGAGTGTCTAAAGAAACTCCAAAAGTGCAACTCCAAGAGCCAAGGCGAGAAGG AAATGTACACGCTAGGAATCACCAACTTCCCCATCCCCGGAGAGCCTGGCTTTCCTCTCAACGCCATTTA TGCCAAGCCTGCGAGCAAACAGGGAGAGAGACCCGGACTGAGGCAAACAGGAAGACCCGGACTGAGGCAAACAGGACCCTCCAGAGTGATAAACCCAGCAAGTGGTGGACTTGCTTTG

TGAAGAGACAGTTCATGAACAAGAGTCTTTCGGGGCCTGGGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG201582 representing NM\_019824

Red=Cloning site Green=Tags(s)

MPAYHSSLMDPDTKLIGNMALLPLRSQFKGPAPRETKDTDIVDEAIYYFKANVFFKNYEIKNEADRTLIY ITLYISECLKKLQKCNSKSQGEKEMYTLGITNFPIPGEPGFPLNAIYAKPASKQEDEMMRAYLQQLRQET

GLRLCEKVFDPQSDKPSKWWTCFVKRQFMNKSLSGPGQ

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul



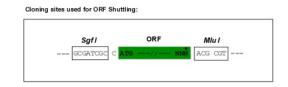
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

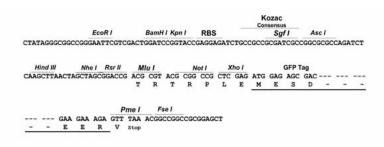
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## **Cloning Scheme:**





**ACCN:** NM\_019824

ORF Size: 534 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:** <u>NM 019824.3</u>

RefSeq Size: 880 bp
RefSeq ORF: 537 bp
Locus ID: 56378
UniProt ID: Q9IM76



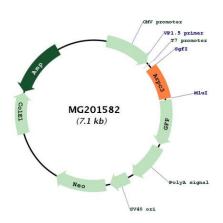
Cytogenetics:

5 F

**Gene Summary:** 

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. 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]

## **Product images:**



Circular map for MG201582