

Product datasheet for **MG205748**

Arpc1b (NM_023142) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arpc1b (NM_023142) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Arpc1b
Synonyms:	41kDa; AA408064; AA408534; AA571392; AF007010; AW208418; L72; p41-ARC; SOP2Hs
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG205748 representing NM_023142 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTACCACAGTTCCTGGTGGAGCCATCAGCTGCCATGCCTGGAACAAGGACCGTACTCAGATCG
CCATCTGCCCCAACAACCATGAGGTGCACATCTATGAGAAGAGCGGTGCCAAGTGAACAAGGTGCACGA
GCTGAAGGAGCACAACGGGCAGGTGACAGGCATCGACTGGGCCCTGAGAGTAACCGCATTGTGACCTGC
GGCAGGACCGCAATGCCTATGTGTGGACGCTGAAGGGCCGACGTGGAAGCCCACACTGGTCATCTCC
GGATCAATCGAGCTGCCGCTGTGTGCGCTGGGCCCAATGAGAACAAGTTCGCCGTGGCAGCGGCTC
CCGGGTCAATTCATCTGTTATTTGAGCAGGAGAATGACTGGTGGGTGTGCAAACACATCAAAAAGCCC
ATCCGCTCCACAGTGCTCAGCCTGGACTGGCATCCCAACAACGTGCTCCTGGCAGCAGGCTCCTGTGACT
TCAAGTGCAGGATCTTCTCTGCCTATATCAAGGAGGTGGAAGAACGGCCAGCCCCACACCGTGGGGCTC
CAAGATGCCCTTTGGGGAGCTGATGTTTGAATCGAGCAGCAGCTGTGGCTGGGTGCATGGGGTCTGCTTC
TCGGCCAGTGGGAGCCGAGTTGCTTGGGTGAGCCATGACAGCACTGTATGCCTGGTAGATGCTGACAAGA
AAATGGCCGTGGCAACCTGGCCTCTGAGACATTACCACTCCTGGCTGTACCTTTATCACAGAAAATAG
TCTAGTGGCAGCGGGCCACGACTGCTTCCCGGTGCTGTTACCTATGACAATGCTGCAGTGACACTGAGC
TTCGGTGGCCGGCTGGATGTACCAAGCAGAGCTCCAGCGTGGCATGACAGCCCAGAGCGCTCCAGA
ACCTGGACAAGAAGGCCAGCTCTGAGGGGGTGCAGCCACTGGGGCCGGCCTGGATTCACTGCACAAGAA
CAGTGTACGCCAAATCTCGGTGCTCAGCGGGGGCAAGGCCAAGTCTCACAGTTCTGCACTACAGGCATG
GATGGCGCATGAGCATCTGGGAGCTGAAGAGCCTGGAGTCAAGCCTTGAAGGACCTGAAAATCAAA

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG205748 representing NM_023142
 Red=Cloning site Green=Tags(s)

MAYHSFLVEPISCHAWNKDRTQIAICPNNHEVHIYEKSGAKWNKVHELKEHNGQVTGIDWAPESNRIVTC
 GTDRNAYVWTLKGRTWKPTLVILRINRAARCVRWAPNENKFVAVGSGSRVISICYFEQENDWWVCKHIKPK
 IRSTVLSLDWHPNNVLLAAGSCDFKCRIF SAYIKEVEERPAPTPWGSKMPPF GELMFESSSSCGWVHGVCF
 SASGSRVAWVSHDSTVCLVDADKKMAVATLASETLPLLAVTFITENSLVAAGHDCFPVLFYDAAVTL S
 FGGRLDVPKQSSQRGMTARERFQNLDDKASSEGAATGAGLDSLHKNSVSI SVLSGGKAKCSQFCTTGM
 DGGMSIWDVKSLESALKDLKIK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_023142

ORF Size: 1116 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_023142.1](#), [NP_075631.1](#)

RefSeq Size: 1495 bp

RefSeq ORF: 1119 bp

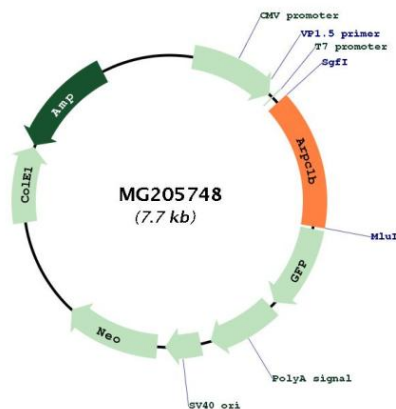
Locus ID: 11867

UniProt ID: [Q9WV32](#)

Cytogenetics: 5 G2

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 MG205748