

## Product datasheet for RC201103

### ARPC1B (NM\_005720) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ARPC1B (NM_005720) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ARPC1B
Synonyms:	ARC41; IMD71; p40-ARC; p41-ARC; PLTEID
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201103 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCCTACCACAGCTTCTGGTGGAGCCCATCAGCTGCCACGCCTGGAACAAGGACCGCACCCAGATTG  
CCATCTGCCCCAACAACCATGAGGTGCATATCTATGAAAAGAGCGGTGCCAATGGACCAAGGTGCACGA  
GCTCAAGGAGCACAACGGGCAGGTGACAGGCATCGACTGGGCCCCGAGAGTAACCGTATTGTGACCTGC  
GGCACAGACCGCAACGCCTACGTGTGGACGCTGAAGGGCCGCACATGGAAGCCCACGCTGGTCATCCTGC  
GGATCAACCGGGCTGCCGCTGCGTGGCTGGGCCCCAACGAGAACAAGTTTGCTGTGGGCAGCGGCTC  
TCGTGTGATCTCCATCTGTTATTTTCGAGCAGGAGAATGACTGGTGGGTTTGCAAGCACATCAAGAAGCCC  
ATCCGCTCCACCGTCTCAGCCTGGACTGGCACCCCAACAATGTGCTGCTGGCTGCCGGCTCCTGTGACT  
TCAAGTGTGCGATCTTTTCAGCCTACATCAAGGAGGTGGAGGAACGGCCGGCACCCACCCCGTGGGGCTC  
CAAGATGCCCTTTGGGGAAGTGTTCGAATCCAGCAGTAGCTGCGGCTGGGTACATGGCGTCTGTTTC  
TCAGCCAGCGGGAGCCGCTGGCCTGGTAAGCCACGACAGCACCCTGCGCTGGCTGATGCCGACAAGA  
AGATGGCCGTCGCGACTCTGGCCTCTGAAACACTACCACTGCTGGCGCTGACCTTCATCAGACAACAG  
CCTGGTGGCAGCGGGCCACGACTGCTTCCCGGTGCTGTTCACCTATGACGCCGCCGCGGGGATGCTGAGC  
TTCGGCGGGCGGCTGGACGTTCTAAGCAGAGCTCGCAGCGTGGCTTGACGGCCCCGAGCGCTTCCAGA  
ACCTGGACAAGAAGGCGAGCTCCGAGGGTGGCAGGCTGCGGGCGCGGGCCTAGACTCGCTGCACAAGAA  
CAGCGTCAGCCAGATCTCGGTGCTCAGCGCGGGAAGGCCAAGTCTCGAGTTCTGCACCACTGGCATG  
GATGGCGGCATGAGTATCTGGGATGTGAAGAGCTTGAGTCAGCCTGAAGGACCTCAAGATCAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA


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**Protein Sequence:** >RC201103 protein sequence  
 Red=Cloning site Green=Tags(s)

MAYHSFLVEPISCHAWNKDRTQIAICPNNHEVHIYEKSGAKWTKVHELKEHNGQVTGIDWAPESNRIVTC  
 GTDRNAYVWTLKGRTWKPTLVILRINRAARCVRWAPNENKFAVGSGSRVISICYFEQENDWWVCKHIKKP  
 IRSTVLSLDWHPNNVLLAAGSCDFKCRIFSAYIKEVEERPAPTPWGSKMPPGELMFESSSSCGWVHGVCF  
 SASGSRVAWVSHDSTVCLADADKKMAVATLASETLPLLALTFITDNSLVAAGHDCFPVLFTYDAAAGMLS  
 FGGRLDVPKQSSQRLTARERFQNLDDKASSEGGTAAGAGLDSLHKNSVSQISVLSGGKAKCSQFCTTGM  
 DGGMSIWDVKSLESALKDLKIK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6557\\_h01.zip](https://cdn.origene.com/chromatograms/mk6557_h01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005720

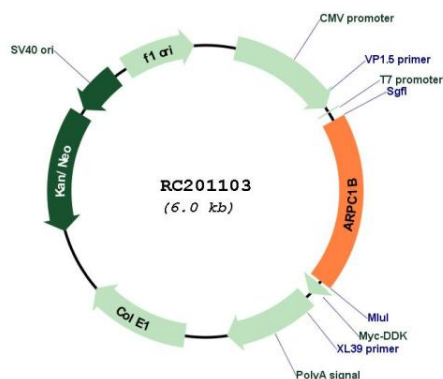
**ORF Size:** 1116 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

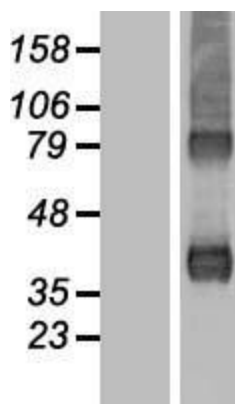
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_005720.4</a>
<b>RefSeq Size:</b>	1551 bp
<b>RefSeq ORF:</b>	1119 bp
<b>Locus ID:</b>	10095
<b>UniProt ID:</b>	<a href="#">O15143</a>
<b>Cytogenetics:</b>	7q22.1
<b>Domains:</b>	WD40
<b>Protein Pathways:</b>	Fc gamma R-mediated phagocytosis, Pathogenic Escherichia coli infection, Regulation of actin cytoskeleton
<b>MW:</b>	40.9 kDa
<b>Gene Summary:</b>	This gene encodes one of seven subunits of the human Arp2/3 protein complex. This subunit is a member of the SOP2 family of proteins and is most similar to the protein encoded by gene ARPC1A. The similarity between these two proteins suggests that they both may function as p41 subunit of the human Arp2/3 complex that has been implicated in the control of actin polymerization in cells. It is possible that the p41 subunit is involved in assembling and maintaining the structure of the Arp2/3 complex. Multiple versions of the p41 subunit may adapt the functions of the complex to different cell types or developmental stages. This protein also has a role in centrosomal homeostasis by being an activator and substrate of the Aurora A kinase. [provided by RefSeq, Mar 2011]

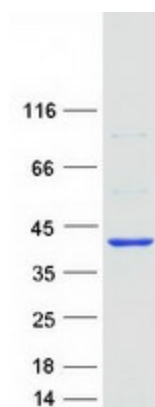
## Product images:



Circular map for RC201103



Western blot validation of overexpression lysate (Cat# [LY417112]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201103 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ARPC1B protein (Cat# [TP301103]). The protein was produced from HEK293T cells transfected with ARPC1B cDNA clone (Cat# RC201103) using MegaTran 2.0 (Cat# [TT210002]).