

## Product datasheet for RC230814

### ARPC1A (NM\_001190996) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ARPC1A (NM_001190996) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ARPC1A
Synonyms:	Arc40; HEL-68; HEL-S-307; SOP2Hs; SOP2L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC230814 representing NM_001190996 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCTGGAACAGGGATCGTACTCATTGCCCTCAGTCCCAATAATCACGAAGTGCACATCTATAAGAAGA  
ACGGGAGCCAGTGGGTGAAAGCTCATGAACTCAAGGAGCACACCGGACACATCACAGGTATTGACTGGGC  
TCCCAAGAGCGACCGCATTGTCCTTGTGGGCGAGACCGCAATGCCTATGTCTGGAGTCAGAAAGATGGT  
GTTTGGAAAGCCAACCCTGGTGATCCTGAGAATTAATCGCGCAGCTACTTTTGTGAAGTGGTCCCCCTAG  
AGAACAAATTTGCTGTGGGAAGTGGAGCAGACTATTTCTGTTTGTACTTTGAGTCTGAAAATGACTG  
GTGGGTGAGCAAGCACATTA AAAAGCCGATTTCGCTCCACAGTCCCTCAGCTTGGATTGGCATCCCAACAAC  
GTTTTGCTGGCAGCAGGATCATGTGACTTCAAATGCAGAGTGTTTTCTGCCTACATTAAGAAGTGGATG  
AAAAGCCAGCCAGCAGCCCTGGGGCAGCAAGATGCCTTTTGGGAGCTGATGTCAGAGTTTGGTGGCAG  
TGGCACTGGTGGCTGGTCCACGGGTAAGCTTCTGCCAGTGGGAGCCGCCTGGCCTGGGTGACGCCAC  
GACAGCACCGTGTCTGTTGCTGATGCCTCAAAAAGTGTGACAGTCTCGACTCTGAAGACAGAGTTCTGC  
CGCTCCTAAGTGTGTCAATTTGTCTCAGAGAACAGCGTCTGGCTGCTGGCCATGACTGCTGCCAATGCT  
CTTTAACTACGATGACCGCGGCTGCCTGACCTTCGTCTCCAAGTTAGATATTCAAAACAGAGCATCCAA  
CGCAACATGTCTGCCATGGAACGCTTCCGCAACATGGACAAGAGAGCCACAACACTGAGGACCGCAACCGG  
CCTTGGAGACGCTGCACCAGAATAGCATCACTCAAGTCTCTATTTATGAGGTGGACAAGCAAGATTGTCTG  
CAAATTTTGCCTACTGGCATCGATGGAGCCATGACAATTTGGGATTTCAAGACCCTCGAGTCTTCCATC  
CAGGGCTCCGGATAATG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC230814 representing NM\_001190996  
Red=Cloning site Green=Tags(s)

MPGTGIVLIALSPNNHEVHIYKKNQSQWVKAHELKEHNGHITGIDWAPKSDRIVTCGADRNAVVSQKDG  
 VWKPTLVILRINRAATFVKWSPLENKFVAVGSGARLISVCYFESENDWWVSKHIKPIRSTVLSLDWHPNN  
 VLLAAGSCDFKCRVFSAYIKEVDEKPASTPWGSKMPFGQLMSEFGGSGTGGWVHGVSFSASGSRLAWVSH  
 DSTVSVADASKSVQVSTLKTFLPLLVSFVSENSVVAAGHDCCPMLFNYDDRGLTFVSKLDIPKQSIQ  
 RNMSAMERFRNMDKRATTEDRNTALETLHQNSITQVSIYEVDKQDCRKFCTTGIDGAMTIWDFKTLLESSI  
 QGLRIM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1540\\_g07.zip](https://cdn.origene.com/chromatograms/ja1540_g07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001190996

**ORF Size:** 1068 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\\_001190996.1](#), [NP\\_001177925.1](#)

**RefSeq ORF:** 1071 bp

**Locus ID:** 10552

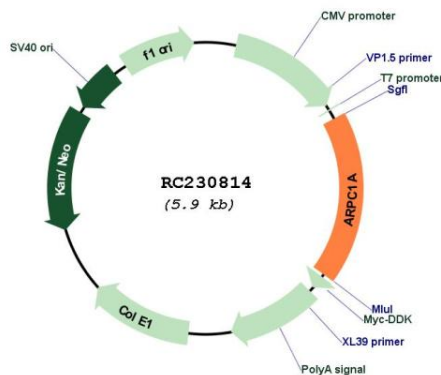
**Cytogenetics:** 7q22.1

**Protein Pathways:** Fc gamma R-mediated phagocytosis, Pathogenic Escherichia coli infection, Regulation of actin cytoskeleton

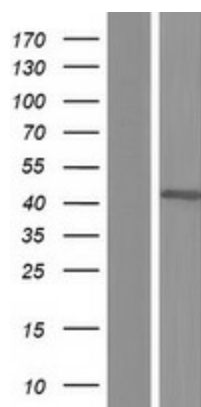
**MW:** 40.1 kDa

**Gene Summary:** 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 ARPC1B. 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. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2010]

## Product images:



Circular map for RC230814



Western blot validation of overexpression lysate (Cat# [LY433813]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230814 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).