

Product datasheet for **RC208053**

ARPC1A (NM_006409) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARPC1A (NM_006409) 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:	>RC208053 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCACTGCATCAGTTTTTACTAGAGCCAATCACCTGTCATGCCTGGAACAGGGATCGTACTCAGATTG
CCCTCAGTCCCAATAATCACGAAGTGCACATCTATAAGAAGAACGGGAGCCAGTGGGTGAAAGCTCATGA
ACTCAAGGAGCACAACGGACACATCACAGGTATTGACTGGGCTCCAAGAGCGACCGCATTGTCACCTGT
GGGGCAGACCGCAATGCCTATGTCTGGAGTCAGAAAGATGGTGTGGGAGCCAACCTGGTGATCTGTA
GAATTAATCGCGCAGCTACTTTTGTGAAGTGGTCCCCCTAGAGAACAAATTTGCTGTGGGAAGTGGAGC
ACGACTCATTCTGTTTGTACTTTGAGTCTGAAAATGACTGGTGGGTGAGCAAGCACATTAAGGAGCCG
ATTCGCTCCACAGTCTCAGCTTGGATTGGCATCCCAACAACGTTTTGCTGGCAGCAGGATCATGTGACT
TCAAAATGCAGAGTGTCTGCCTACATTAAGAAGTGGATGAAAAGCCAGCCAGCACGCCCTGGGGCAG
CAAGATGCCTTTTGGGCAGCTGATGTCAGAGTTTGGTGGCAGTGGCACTGGTGGCTGGGTCCACGGGGTA
AGCTTCTCTGCCAGTGGGAGCCGCTGGCCTGGGTGAGCCAGCAGCAGCACCGTGTCTGTTGCTGATGCC
CAAAAAGTGTGCAGGTCTCGACTCTGAAGACAGAGTTCCTGCCGCTCCTAAGTGTGCATTTGTCTCAGA
GAACAGCGTCGTGGCTGCTGGCCATGACTGCTGCCAATGCTCTTAACTACGATGACCGCGGCTGCCTG
ACCTTCGTCTCCAAGTTAGATATTCCAAAACAGAGCATCCAACGCAACATGTCTGCCATGGAACGCTTCC
GCAACATGGACAAGAGAGCCACAACCTGAGGACCGCAACCGGCCTTGGAGACGCTGCACCAGAATAGCAT
CACTCAAGTCTCTATTTATGAGGTGGACAAGCAAGATTGTCGCAATTTTGCCTACTGGCATCGATGGA
GCCATGACAATTTGGATTTCAAGACCCTCGAGTCTTCCATCCAGGGCCTCCGGATAATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC208053 protein sequence
Red=Cloning site Green=Tags(s)

MSLHQFLLEPITCHAWNDRDTQIALSPNNHEVHIYKKNQSQWVKAHELKEHNGHITGIDWAPKSDRIVTC
 GADRNAVYVWSQKDGWVKPTLVILRINRAATFVKWSPLENKFAVSGGARLISVCYFESENDWWVSKHIKPK
 IRSTVLSLDWHPNPNVLLAAGSCDFKCRVFSAYIKEVDEKPASTPWGSKMPFGQLMSEFGGSGTGGWVHGV
 SFASAGSRLAWVSHDSTVSVADASKSVQVSTLKTFLPLLVSFVSENSVVAAGHDCCPMLFNYYDDRGCL
 TFVSKLDIPKQSIQRNMSAMERFRNMDKRATTEDRNTALETLHQNSITQVSIYEVDKQDCRKFCTTGIDG
 AMTIWDFKTLESSIQGLRIM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6342_c08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_006409

ORF Size: 1110 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_006409.4](#)

RefSeq Size: 1623 bp

RefSeq ORF: 1113 bp

Locus ID: 10552

UniProt ID: [Q92747](#)

Cytogenetics: 7q22.1

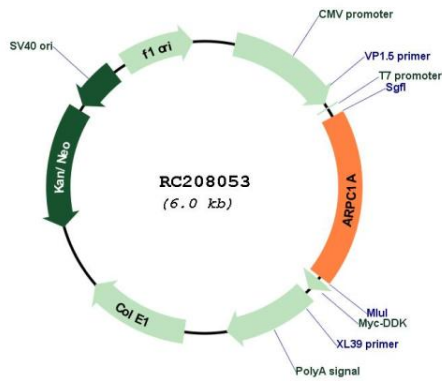
Domains: WD40

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

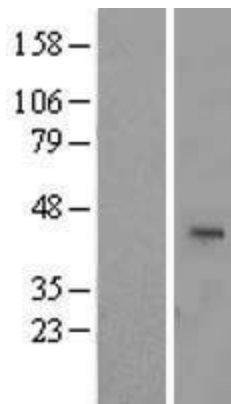
MW: 41.6 kDa

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]

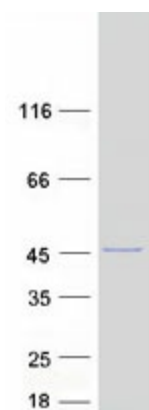
Product images:



Circular map for RC208053



Western blot validation of overexpression lysate (Cat# [LY416669]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208053 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ARPC1A protein (Cat# [TP308053]). The protein was produced from HEK293T cells transfected with ARPC1A cDNA clone (Cat# RC208053) using MegaTran 2.0 (Cat# [TT210002]).