

Product datasheet for RC212631

p16 ARC (ARPC5) (NM_005717) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p16 ARC (ARPC5) (NM_005717) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	p16 ARC
Synonyms:	ARC16; dj127C7.3; p16-Arc
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212631 representing NM_005717 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGAAGAACACAGTGTCTGTCGGCCCGCTTCCGGAAGGTGGACGTGGATGAATATGACGAGAACAAGT
TCGTGGACGAAGAAGATGGGGGCGACGGCCAGGCCGGGCCGACGAGGGCGAGGTGGACTCCTGCCTGCG
GCAAGGAAACATGACAGCTGCCCTACAGGCAGCTCTGAAGAACCCCCCTATCAACACCAAGAGTCAGGCA
GTGAAGGACCGGGCAGGCAGCATTGTCTTGAAGGTGCTCATCTCTTTAAAGCTAATGATATAGAAAAGG
CAGTTCAATCTCTGGACAAGAATGGTGTGGATCTCCTAATGAAGTATATTATAAAGGATTTGAGAGCCC
GTCTGACAATAGCAGTGCTATGTTACTGCAATGGCATGAAAAGGCACTTGCTGCTGGAGGAGTAGGGTCC
ATTGTTCTGTCTTGACTGCAAGAAAACTGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC212631 representing NM_005717 Red=Cloning site Green=Tags(s)
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MSKNTVSSARFRKVDVDEYDENKFVDEEDGGDQAGPDEGEVDSCLRQGNMTAALQAALKNPPINTKSQA
VKDRAGSIVLKVLI SFKANDIEKAVQSLDKNGVDLLMKYIYKGFESPSDNSSAMLLQWHEKALAAGVGVS
IVRVL TARKTV

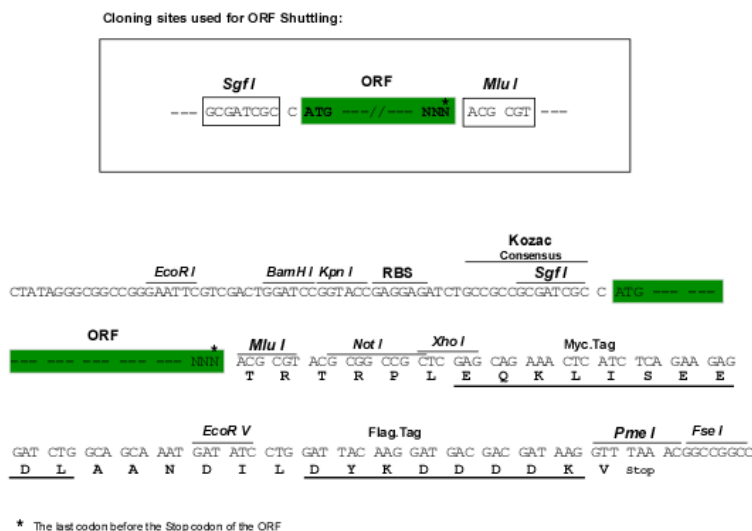
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	https://cdn.origene.com/chromatograms/mk6487_g05.zip
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Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM 005717

ORF Size: 453 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

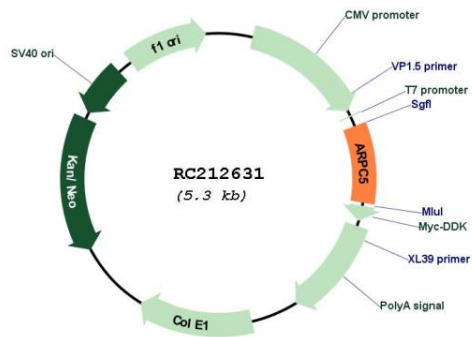
RefSeq: NM_005717.4

RefSeq Size: 2000 bp

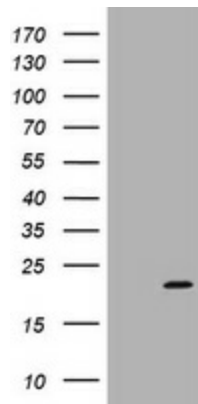
RefSeq ORF: 456 bp

Locus ID:	10092
UniProt ID:	<u>O15511</u>
Cytogenetics:	1q25.3
Domains:	p16_Arc
Protein Pathways:	Fc gamma R-mediated phagocytosis, Pathogenic Escherichia coli infection, Regulation of actin cytoskeleton
MW:	16.1 kDa
Gene Summary:	This gene encodes one of seven subunits of the human Arp2/3 protein complex. The Arp2/3 protein complex has been implicated in the control of actin polymerization in cells and has been conserved through evolution. The exact role of the protein encoded by this gene, the p16 subunit, has yet to be determined. Alternatively spliced transcript variants encoding different isoforms have been observed for this gene. [provided by RefSeq, Jul 2012]

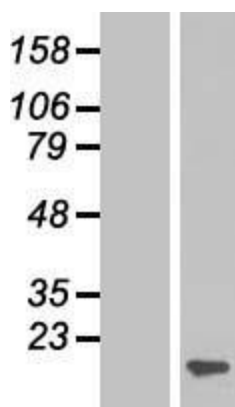
Product images:



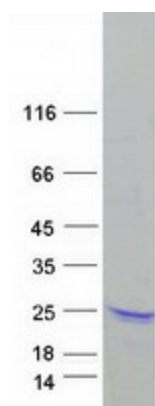
Circular map for RC212631



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ARPC5 (Cat# RC212631, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ARPC5 (Cat# [TA505696]). Positive lysates [LY417115] (100ug) and [LC417115] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417115]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212631 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ARPC5 protein (Cat# [TP312631]). The protein was produced from HEK293T cells transfected with ARPC5 cDNA clone (Cat# RC212631) using MegaTran 2.0 (Cat# [TT210002]).