

Product datasheet for RC203111

Arp2 (ACTR2) (NM_005722) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arp2 (ACTR2) (NM_005722) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Arp2
Synonyms:	ARP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203111 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGGACAGCCAGGGCAGGAAGGTGGTGGTGTGCGACAACGGCACCGGGTTTGTGAAGTGTGGATATGCAG
GCTCTAACTTTCCAGAACACATCTTCCCAGCTTTGGTTGGAAGACCTATTATCAGATCAACCACCAAAGT
GGGAAACATTGAAATCAAGGATCTTATGGTTGGTGTGAGGCAAGTGAATTACGATCAACGTTAGAAGTT
AACTACCTATGAAAAATGGCATAGTACGAAATGGGATGACATGAAACACCTGTGGACTACACATTTG
GACCAGAGAACTTAATATAGATACCAGAAATGTAATACTTACTCACAGAACCTCCTATGAACCCAAC
CAAAAACAGAGAGAAGATTGTAGAGGTAATGTTTGAAACTTACCAGTTTTCCGGTGTATATGTAGCCATC
CAGGCAGTTCTGACTTTGTACGCTCAAGGTTTATTGACTGGTGTAGTGGTAGACTCTGGAGATGGTGTGA
CTCACATTTGCCAGTATATGAAAGCTTTTCTCTCCCTCATCTTACCAGGAGACTGGATATTGCTGGGAG
GGATATAACTAGATATCTTATCAAGCTACTTCTGTTGCGAGGATACGCCCTTCAACCACTCTGCTGATTTT
GAAACGGTTCGCATGATTAAGAAAACTGTGTTACGTGGGATATAATATTGAGCAAGAGCAGAACTGG
CCTTAGAAACCACAGTATTAGTTGAATCTTATACACTCCCAGATGGACGTATCATCAAAGTTGGGGGAGA
GAGATTTGAAGCACCAGAAGCTTTATTTACGCTCACTTGATCAATGTTGAAGGAGTTGGTGTGCTGAA
TTGCTTTTTAACACAATTCAGGCAGCTGACATTGATACCAGATCTGAATTCTACAACACATTGTGCTTT
CTGGAGGGTCTACTATGTATCCTGGCCTGCCATCACGGTTGGAACGAGAACTTAAACAGCTTACTTAGA
ACGAGTTTTGAAGGGTGTGTGAAAACTTTCTAAATTTAAGATCCGCATTGAAGACCCACCCCGCAGA
AAGCACATGGTATTCTGGTGGTGCAGTTCTAGCGGATATCATGAAAGACAAAGACAACCTTTGGATGA
CCCGACAAGAGTACCAAGAAAAAGGTGTCCGTGTCTAGAGAACTTGGTGTGACTGTTCGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203111 protein sequence
Red=Cloning site Green=Tags(s)

MDSQGRKVVVCDNGTGFVKCGYAGSNFPEHIFPALVGRPIIRSTTKVGNIEIKDLMVGDEASELRSTLEV
 NYPMENGIVRNWDDMKHLWDYTFGPEKLNIDTRNCKILLTEPPMNPTKNREKIVEVMFETYQFSGVYVAI
 QAVLTLYAQGLLTGVVVDSDGDGVTHICPVYESFSLPHLTRRLDIAGRDITRYLIKLLLRGYAFNHSADF
 ETVRMIKEKLCYVGNIEQEQLALETTVLVESYTLPDGRIKIKVGERFEAPEALFQPHLINVEGVGVAE
 LLFNTIQAADIDTRSEFYKHIVLSGGSTMYPLPSRLERELKQLYLERVLKGDVEKLSKFKIRIEDPPRR
 KHMVFLGGAVLADIMKDKDNFWMTRQEYQEKGVRVLEKLGVTVR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6153_g12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_005722

ORF Size: 1182 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_005722.4](#)

RefSeq Size: 3929 bp

RefSeq ORF: 1185 bp

Locus ID: 10097

UniProt ID: [P61160](#)

Cytogenetics: 2p14

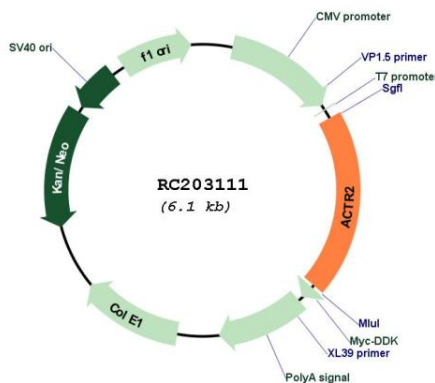
Domains: ACTIN

Protein Families: Druggable Genome

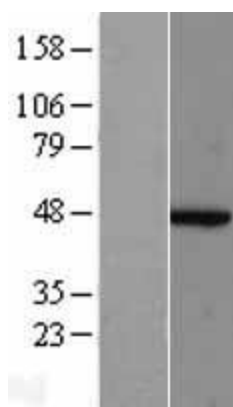
MW: 44.8 kDa

Gene Summary: The specific function of this gene has not yet been determined; however, the protein it encodes is known to be a major constituent of the ARP2/3 complex. This complex is located at the cell surface and is essential to cell shape and motility through lamellipodial actin assembly and protrusion. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC203111



Western blot validation of overexpression lysate (Cat# [LY401746]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203111 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).