

Product datasheet for **RC208460**

Arp3 (ACTR3) (NM_005721) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Arp3
Synonyms:	ARP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208460 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGGACGGCTGCCGGCCTGTGTGGTGGACTGTGGCACGGGGTATACAAAAGTAGGATATGCTGGAA
ATACAGAACACAGTTTATCATCCCTTCCTGTATTGCTATTAAGGAGTCAGCAAAAGTGGGTGATCAAGC
TCAAAGGAGGGTGATGAAAGGTGTTGATGACCTAGACTTCTTCATTGGTGATGAAGCAATAGAAAAACCT
ACATATGCAACAAAGTGGCCAATCCGCCATGGTATAGTTGAAGATTGGGACTTAATGGAAAGGTTTATGG
AGCAAGTGATCTTTAAATATTTAAGGGCAGAACCTGAAGACCATTATTTCTTTTGACTGAACCTCCATT
GAATACTCCAGAAAACAGGGAATATACTGCTGAAATAATGTTTGAGTCCTCAATGTTCCAGGCTTGATAC
ATTGCTGTGCAGGCTGTTCTTGCTTAGCTGCATCTTGACCTCAAGACAAGTAGGAGAACGGACGTTGA
CCGGTACGGTAATAGACAGTGGAGATGGTGTCACTCATGTCAATCCTGTGGCTGAAGGGTATGTGATTGG
CAGCTGTATTAACACATTCCAATCGCAGGACGAGATATAACATATTTTATTCAGCAACTGCTGAGAGAC
CGAGAAGTAGGAATCCCTCCAGAACATCCTTGAAAGTCTAAGGCAGTAAAGGAGCGCTATAGTTATG
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TGGAATCAATGCTATCTCAAAGAAAGATTTTCTATCGATGTTGGTTATGAGAGATTTTGGGACCTGAA
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TTCAGAATTGTCTATTGATGTCAGACGTCCTCTCTACAAGAATATTGTCTCTCTGGAGGTTCAACCAT
GTTCCAGGACTTTGGACGTCGCTTGCAAAGAGATTTGAAAAGAACTGTAGATGCCCGGCTGAAATTAAGT
GAGGAATTGAGTGGTGGTAGATTGAAGCCAAAACCTATTGATGTACAAGTCATTACACACCACATGCAGC
GATATGCAGTTTGGTTTGGAGGATCAATGCTGGCTTCCACGCCTGAGTTCTACCAAGTATGCCACACCAA
AAAGGATTATGAAGAAATTGGACCTAGCATTGTGCTCACAATCCAGTGTTTGGAGTCATGTCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208460 protein sequence
 Red=Cloning site Green=Tags(s)

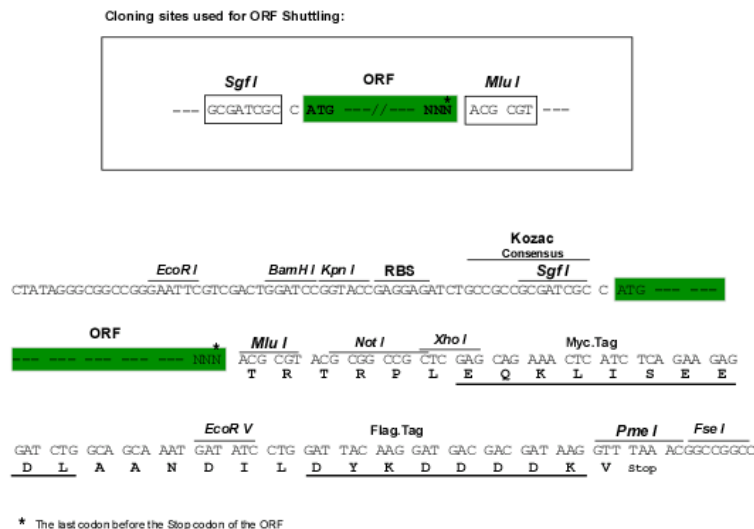
MAGRLPACVVDCGTGYTKLGYAGNTEPQFIIPSCIAIKESAKVGDQAQRRVMKGVDDLDFFIGDEAIEKP
 TYATKWPIRHGIVEDWDLMERFMEQVIFKYLRAEPEDHYFLLTEPLNTPENREYTAEIFESFNPGLY
 IAVQAVLALAASWTSRQVGERTLTGTVIDSGDGVTHVIPVAEGYVIGSCIHKIPIAGRDITYFIQQLLRD
 REVGIIPPEQSLETAQVYKERYSYVCPDLVKEFNKYDTDGSKWIKQYTGINAISKKEFSIDVGYERFLGPE
 IFFHPEFANPDFTQPISEVVDEVIQNCPIDVRRPLYKNIIVLSGGSTMFRDFGRRLQRDLKRTVDARLKLS
 EELSGRLKPKPIDVQVITHMQRYAVWFGGSMFASTPEFYQVCHTKKDYEIIGPSICRHNPFVFGVMS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6346_h07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005721

ORF Size: 1254 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_005721.5](#)

RefSeq Size: 5708 bp

RefSeq ORF: 1257 bp

Locus ID: 10096

UniProt ID: [P61158](#)

Cytogenetics: 2q14.1

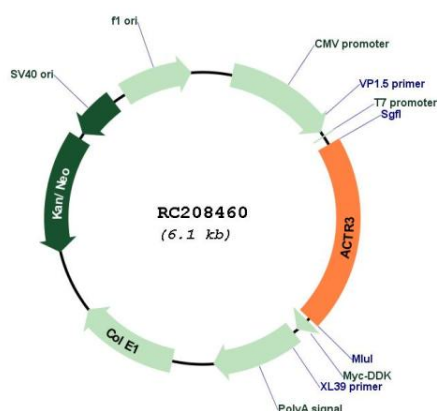
Domains: ACTIN

Protein Families: Druggable Genome

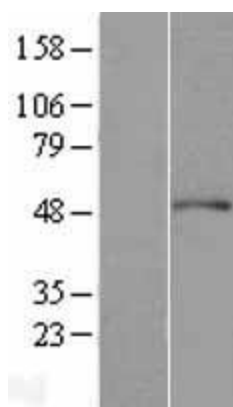
MW: 47.4 kDa

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. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Mar 2013]

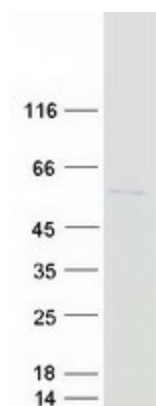
Product images:



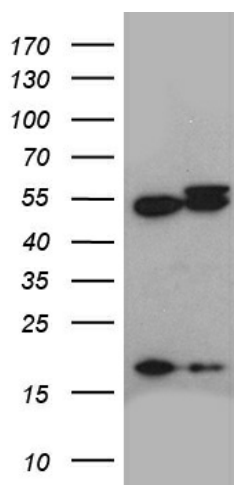
Circular map for RC208460



Western blot validation of overexpression lysate (Cat# [LY417113]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208460 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACTR3 protein (Cat# [TP308460]). The protein was produced from HEK293T cells transfected with ACTR3 cDNA clone (Cat# RC208460) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ACTR3 (Cat# RC208460, 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-ACTR3 (Cat# [TA812199]). Positive lysates [LY417113] (100ug) and [LC417113] (20ug) can be purchased separately from OriGene.