

Product datasheet for RC202493

ACTR1B (NM_005735) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|-------------------------------------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | ACTR1B (NM_005735) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | ACTR1B |
| Synonyms: | ARP1B; CTRN2; PC3 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC202493 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGTCTACGACATCATCGCCAACAGCCTGTGGTCATCGACAACGGTTCGGGGTGATTAAGCTG
GCTTTGCAGGAGACCAGATTCCCAAATACTGTTCCCAAATATGTCGGGCGGCCAAGCACATGCGGGT
GATGGCTGGAGCCCTGGAGGGGACCTTTCATCGGACAAAAGCAGAGGAGCACCGGGGCTGCTGACC
ATCCGCTACCCCATGGAGCACGGCGTGGTGCAGACTGGAACGACATGGAACGCATCTGGCAGTACGTCT
ACTCCAAGGATCAGCTGCAGACCTTCTCGGAGGAGCATCCTGTGCTCCTCACGGAGGCCCGCTCAACCC
GAGTAAGAACCGGAGAAGGCGGCAGAGGTGTTCTTTGAGACCTCAACGTGCCGGCCCTGTTTCATCTCC
ATGCAGGCTGTGCTCAGTCTGTACGCAACAGGACGACGACAGGAGTGGTTCTAGACTCAGGGGACGGGG
TCACTCATGCTGTGCCATCTATGAGGGCTTTGCCATGCCTCACTCCATCATGCGGGTGGACATTGCCGG
CCGCGACGTCTCCCGCTACCTCCGACTCCTGCTGCGCAAGGAAGGGGTTGACTTCCATACCTCGGCTGAG
TTGAGGTTGTCCGACAATCAAAGAGCGAGCGTGCTACCTGTCCATCAACCCACAGAAGGATGAGGCTC
TGGAGACGGAGAAGGTGCAGTACACGTTGCCAGACGGCAGCAGCCTTGATGTGGGGCTGCACGATTCCG
GGCCCCGAGCTGCTGTTCCAGCCGACCTTGTGGGGATGAGAGTGAGGGGCTCCATGAGTGGTGGCC
TTCGCCATACACAAGTCCGACATGGACCTGCGCCGACGCTGTTCCGCAACATCGTGCTCCTCAGGTGGCT
CAACGCTTTTCAAAGGCTTCGGAGACCGATTACTCAGTGAAGTGAAGAAGCTTGCCCAAAGGATATCAA
AATCAAGATCTCAGCCCCGAGGAACGGCTGTAATCCACATGGATTGGCGGCTCCATCCTGGCCTCGCTG
GACACTTTAAGAAGATGTGGGTGTCCAAAAGGAGTATGAAGAGGATGGCTCCCGTGCTATTTCATCGCA
AAACTTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202493 protein sequence
Red=Cloning site Green=Tags(s)

MESYDIIANQPVIDNGSGVIKAGFAGDQIPKYCFPNYVGRPKHMRVMAGALEGDLFIGPKAEHRGLLT
 IRYPMEHGVRDWNDMERIWQYVYSKDQLQTFSEEHPVLLTEAPLNPSKNREKAAEVFFETFNPALFIS
 MQAVLSLYATGRITGVVLDSGDGVTHAVPIYEGFAMPHSIMRVDIAGRDSRYLRLLLRKEGVDFHTSAE
 FEVVRTIKERACYLSINPQKDEALETEKVQYTLPDGSTLDVGPAPFRAPPELLFQPDLVGDESEGLHEVVA
 FAIHKSDMDLRRTLFAINIVLSGGSTLFGKFGDRLLSEVKKLAPKDIKIKISAPQERLYSTWIGGSILASL
 DTFKMMVYSKKEYEEDGSRAIHRKTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6405_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_005735

ORF Size: 1128 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_005735.4](#)

RefSeq Size: 2258 bp

RefSeq ORF: 1131 bp

Locus ID: 10120

UniProt ID: [P42025](#)

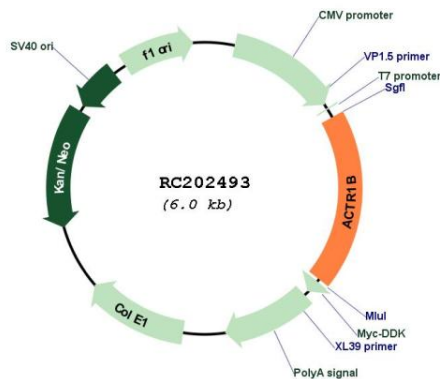
Cytogenetics: 2q11.2

Domains: ACTIN

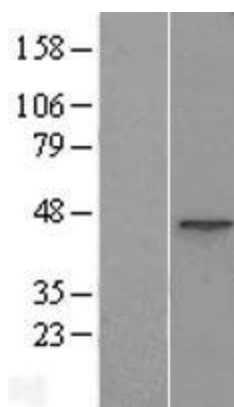
MW: 42.3 kDa

Gene Summary: This gene encodes a 42.3 kD subunit of dynactin, a macromolecular complex consisting of 10 subunits ranging in size from 22 to 150 kD. Dynactin binds to both microtubules and cytoplasmic dynein and is involved in a diverse array of cellular functions, including ER-to-Golgi transport, the centripetal movement of lysosomes and endosomes, spindle formation, chromosome movement, nuclear positioning, and axonogenesis. This subunit, like ACTR1A, is an actin-related protein. These two proteins, which are of equal length and share 90% amino acid identity, are present in a constant ratio of approximately 1:15 in the dynactin complex. [provided by RefSeq, Aug 2008]

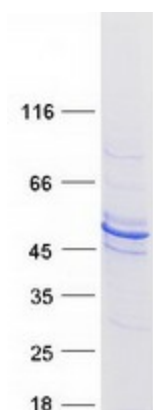
Product images:



Circular map for RC202493



Western blot validation of overexpression lysate (Cat# [LY417103]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202493 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACTR1B protein (Cat# [TP302493]). The protein was produced from HEK293T cells transfected with ACTR1B cDNA clone (Cat# RC202493) using MegaTran 2.0 (Cat# [TT210002]).