

Product datasheet for **RR202011**

Actn4 (NM_031675) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Actn4 (NM_031675) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Actn4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR202011 representing NM_031675
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGTGGACTATCACGCGCGAACCAGGCGTACCAGTACGGCCCAAGCAGCGCGCAATGGCACGGGCG
 GCGGCGGAGGCATGGGCGACTACATGGCCAGGAGGATGACTGGGACCGGGACCTGCTGTTGGACCGGC
 CTGGGAGAAGCAGCAGCGCAAGACCTTCACAGCCTGGTGCAACTCCCATCTGCGGAAGGCTGGCACTCAG
 ATCGAGAACATCGATGAGGATTTCCGGGATGGGCTCAAACCTTATGCTTCTGCTGGAGGTCATTTACGGGG
 AGCGGTTGCCTAAGCCAGAGCGGGGAAGATGCGAGTGCACAAGATCAACAATGTAAACAAGCCCTGGA
 CTTTCATCGCCAGCAAGGGAGTCAAGCTGGTGTCCATTGGGGCAGAAGAGATCGTGGATGGCAATGCAAAAG
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 CTGCCAAGGAAGGACTCCTCCTCTGGTCCAGAAAAGACAGCCCGTATAAAAACGTCAACGTCCAGAA
 CTTCCATATCAGCTGGAAGGATGGTCTGGCCTTCAACGCGCTCATCCACCGGCACAGACCTGAGCTGATT
 GAGTATGACAAACTGAGGAAGGATGATCCAGTCAACAACCTAAACAATGCATTTGAAGTGGCTGAGAAAT
 ACCTTGATATCCCAAGATGTTGGATGCTGAGGACATCGTGAACACAGCCCGGCCGACGAGAAGGCCAT
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 TGTCCAGCTGGAGATCAACTTCAACACCTGCAGACCAAGCTGCGGCTGAGCAACCGGCTGCCTTCATGC
 CCTCCGAGGGCAGGATGGTCTCGGACATCAACAATGGGTGGCAACATCTGGAGCAGGCTGAGAAGGCGTA
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 AAGGCTTCCATCCATGAGGCTGGACCGATGGGAAGGAGGCCATGCTGAAGCACCAGGACTATGAGACAG
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 AAGCCTTGAGAAAACAGAGAAACAGCTGGAGACCATCGACCAGTACACTTGGAGTATGCTAAGCGGGC
 CGCGCCCTTCAACAACCTGGATGGAGAGTCCATGGAGGACCTGCAGGACATGTTTCATCGTCCACACCATC
 GAGGAGATTGAGGCTGATCTCAGCCACGACAGTTCAAGTCCACCCTGCCAGATGCCGACAGGGAGC
 GTGAGGCCATCCTGGCCATCCACAAGAGGCCAAAGGATCGCTGAGAGCAATCACATCAAGCTGTGCGG
 CAGCAACCCCTACACCAGCGTTACACCCAGATCATCAACTCAAATGGGAGAAGGTGCAGCAGCTGGTG
 CCGAAGCGGGACACGCACTCCTGGAAGAGCAGAGCAAGCAGCAATCAAATGAGCACCTTCGCCGACAGT
 TTGCCAGCCAAGCCAATATGGTGGGGCCCTGGATCCAGACCAAGATGGAGGAGATTGGGCGCATCTCCAT
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 CGAGCCTCCTTCAACCCTTTGACAAGGACCATGGCGGGCACTGGGGCTGAGGAATTCAGGCTGCTG
 TCATCAGCCTGGGCTACGACGTGGAGAATGACCGGCAGGGTATGCTGAGTTCAACCGGATCATGAGTGT
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 GACACAGACACCGCCGATCAGGTCATCGCTCCTTCAAGGTCTGGCCGGGGACAAGAATTCATCACTG
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 GGGCCCTGATGCTGCTCCAGGCGCCCTTGACTACAAGTCTTCTACAGCCCTCTATGGGAGAGCGAC
 CTG

ACGCGTACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >RR202011 representing NM_031675
 Red=Cloning site Green=Tags(s)

MVDYHAANQAYQYGPSSGGNGTGGGGMGDYMAQEDDWRDRLLLDPAWEKQQRKFTAWCNShLRKAGTQ
 IENIDEDFRDGLKMLLLEVISGERLPKPERGKMRVHKINNVNKALDFIASKGVKLVSIGAEEIVDGNK
 MTLGMIWTIILRFAIQDISVEETSAKEGLLLWCQRKTAPYKKNVQNFHISWKDGLAFNALIHRHRPELI
 EYDKLRKDDPVTNLNNAFEVAEKYLDIPKMLDAEDIVNTARPDEKAIMTYVSSFYHAFSGAQKAETAANR
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 CQLEINFNTLQTKRLSNRPAFMPSEGRMVS DINNGWQHLEQAEGYEEWLLNEIRRLERLDHLAEKFRQ
 KASIHAEWTDGKEAMLKHRDYETATLSDIKALIRKHEAFESDLAAHQDRVEQIAAIAQELNELDYDShN
 VNTRCQKICDQWNLGSLTHSRREALKTEKQLETIDQLHLEYAKRAAPFNNWMSAMEDLQDMFIVHTI
 EEIEGLISAHDQFKSTLPDADREREAIIAIHKEAQRIAESNHIKLSGNSPYTSVTPQIINSKWEKVQQLV
 PKRDHALLEEQSKQQSNEHLRRQFASQANMVGPIQTKMEEIGRISIEMNGTLEDQLSHLKQYERSIVDY
 KPNLDLLEQQHQLIQEALIFDNKHTNYTMEHLRVGWEQLLTTIARTINEVENQILTRDAKGISQEQMQEF
 RASFNFHFDKDHGGALGPEEFKACLISLGYDVENDRQGD AEFNRIMSVVDPNHSGLVTFQAFIDFMSRETT
 DTDADQVIASFVKVLAGDKNFITAEELRRELPPDQA EYCIARMAPYQGPDAAPGALDYKSFSTALYGESD
 L

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

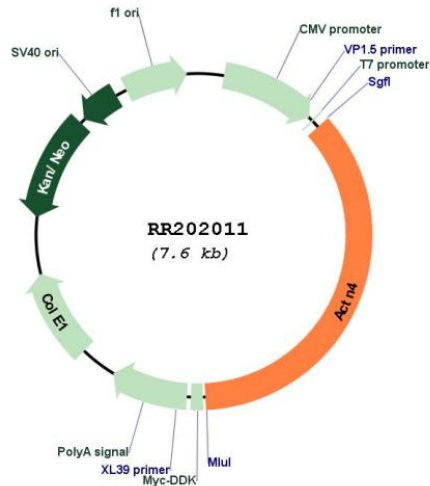
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_031675

ORF Size: 2733 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_031675.2](#), [NP_113863.2](#)

RefSeq Size: 3885 bp

RefSeq ORF: 2736 bp

Locus ID: 63836

UniProt ID: [Q9QXQ0](#)

Cytogenetics: 1q21

MW: 104.9 kDa

Gene Summary: alpha-actinin cytoskeletal protein that anchors various actin-containing microfilaments to cellular structures; anchors V myosins to cellular structures via the RING finger-containing protein BERP [RGD, Feb 2006]