

Product datasheet for **RC207474**

ACTL7B (NM_006686) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ACTL7B (NM_006686) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ACTL7B
Synonyms:	Tact1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207474 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGACAAGGAACAGCCCCATGCCCTGGGCACGGCTCAGGGTGACCCTGGAGAGGCAGGAACACGGC
CCGGCCCTGACGCCAGCCTCCGGGACACAGGTGCGGCCACTCAGCTCAAGATGAAGCCAGGAAGGTGCA
CAAGATCAAGGGGTATCATCGACCTGGGCTCCAGTACTGCAAGTGCGGCTACGCGGGAGAGCCGAGG
CCCACCTACTTCATCTCCTCCACCGTGGCAAACGCTGCCCGAGGCGGCCGACGCTGGCGACACCCGCA
AGTGGACTTTAGTGGCCATGAGCTGCTCAACACGGAGGCGCCTCTCAAGCTGGTGAACCCGCTGAAGCA
CGGCATCGTGGTGGACTGGGACTGCGTGCAGGACATCTGGGAGTACATCTCCGCACCGCCATGAAGATC
CTCCCCGAGGAGCACGCTGTGCTGGTCTCCGACCTCCGCTCAGCCCCAGCAGCAACCGGAGAAGTACG
CGGAGCTCATGTTTGAGACCTTCGGCATCCCAGCCATGCACGTGACGTCCAGTCCGTTGCTGTCATCTA
CTCCTACGGCAAGACCTCGGGCTGGTGGTGGAGAGCGGGCACGGCGTCTCGCACGTGGTGGCCATATCC
GAGGGCGACGTGCTGCCGGCCTGACCAGCCGCGCGACTACGCTGGGGTGACCTACCAACTACCTGA
TGCAGTGCTCAATGAGGCGGGCCACGCATTACGGACGACCACCTGCACATCATAGAGCACATCAAGAA
GAAGTGTGCTATGCGGCCTTCTGCCCGAGGAGAGCTGGGCCCTGGTCCCGAGGAGCTGCGCGTGGAC
TACGAGTCCCGGACGGCAAACATCACCATTGGCCAGGAGCGTTCGGTTGCTGAGATGCTCTTCC
AGCCCTCCCTGGCAGGCAGCACCCAGCCGGCCTCCCGGAGCTCACAGCTGCCTGCCTGGGCCGCTGCCA
GGACACGGGCTTCAAGGAGGAGATGGCCGCAACGTGCTACTGTGTGGCGCTGCACTATGCTGGATGGC
TTCCCCGAGCGCTTCCAGAGGGAGCTGAGCCTCCTCTGCCCGGGGACAGCCCTGCAGTGGCTGCCGCTC
CTGAGAGGAAGACCTCCGTGTGGACCGCGGTTCCATCCTGGCCTCCCTGCAGGCCTTCCAACAGCTCTG
GGTCAAGGAAGAGTTTGAGGAGCGGGCAGCGTGCCATCTACAGCAAGTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC207474 protein sequence
Red=Cloning site Green=Tags(s)

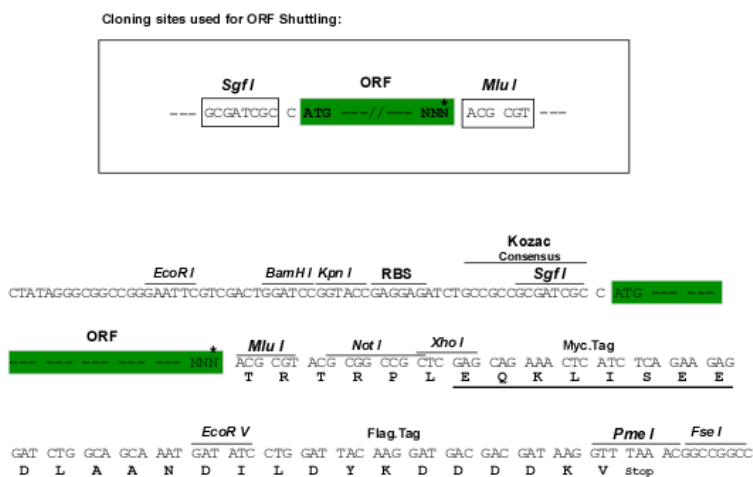
MATRNPMPLGTAQGDPEAGTRPGDASLRDTGAATQLKMKPRKVHKIKAVIIDLGSQYCKGYAGEPR
 PTYFISSTV GKRCPEAADAGDTRKWL VGHELLNTEAPLKL VNP LKHGI VVDWDCVQDIWEYIFRTAMKI
 LPEEHAVLVSDPPLSPSSNREKYAELMFETFGIPAMHVTSQSLLSIYSYGKTSGLVVESGHGVSHVVPIS
 EGDVLPGLTSRADYAGDLTNYLMQLLNEAGHAFDDHLHIIEHIKKKCCYAAFLPEEELGLVPEELRVD
 YELPDGKLIITIGQERFRCSEMLFQPSLAGSTQPLPELTAACLGRCDTGFKEEMAANVLLCGGCTMLDG
 FPERFQRELSLLCPGDSPAVAAAAPERKTSVWTGGSILASLQAFQQLWVSKEEFEERGSVAIYSK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6335_b01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_006686

ORF Size: 1245 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_006686.4](#)

RefSeq Size: 1408 bp

RefSeq ORF: 1248 bp

Locus ID: 10880

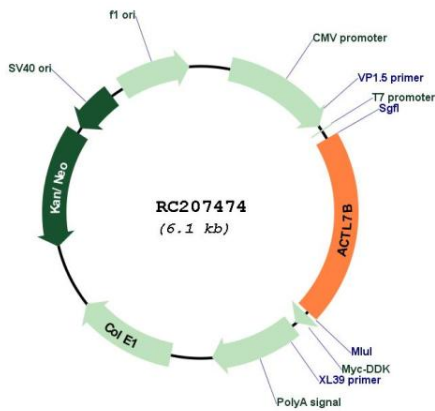
UniProt ID: [Q9Y614](#)

Cytogenetics: 9q31.3

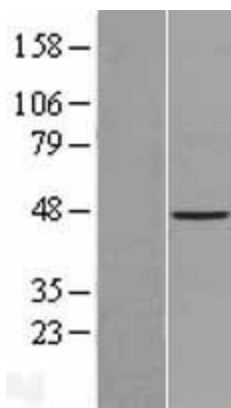
MW: 45.2 kDa

Gene Summary: The protein encoded by this gene is a member of a family of actin-related proteins (ARPs) which share significant amino acid sequence identity to conventional actins. Both actins and ARPs have an actin fold, which is an ATP-binding cleft, as a common feature. The ARPs are involved in diverse cellular processes, including vesicular transport, spindle orientation, nuclear migration and chromatin remodeling. This gene (ACTL7B), and related gene, ACTL7A, are intronless, and are located approximately 4 kb apart in a head-to-head orientation within the familial dysautonomia candidate region on 9q31. Based on mutational analysis of the ACTL7B gene in patients with this disorder, it was concluded that it is unlikely to be involved in the pathogenesis of dysautonomia. Unlike ACTL7A, the ACTL7B gene is expressed predominantly in the testis, however, its exact function is not known. [provided by RefSeq, Jul 2008]

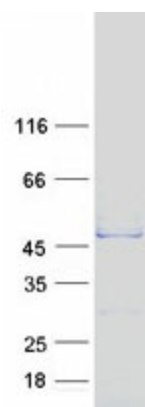
Product images:



Circular map for RC207474



Western blot validation of overexpression lysate (Cat# [LY416488]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207474 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACTL7B protein (Cat# [TP307474]). The protein was produced from HEK293T cells transfected with ACTL7B cDNA clone (Cat# RC207474) using MegaTran 2.0 (Cat# [TT210002]).