

Product datasheet for **RG207474**

ACTL7B (NM_006686) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ACTL7B (NM_006686) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ACTL7B
Synonyms: Tact1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG207474 representing NM_006686
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGACAAGGAACAGCCCCATGCCCTGGGCACGGCTCAGGGTGACCCTGGAGAGGCAGGAACACGGC
 CCGGCCCTGACGCCAGCCTCCGGGACACAGGTGCGGCCACTCAGCTCAAGATGAAGCCAGGAAGGTGCA
 CAAGATCAAGGGGTATCATCGACCTGGGCTCCAGTACTGCAAGTGCGGCTACGCGGGAGAGCCGAGG
 CCCACCTACTTCATCTCCTCCACCGTGGCAAACGCTGCCCGAGGCGGCCGACGCTGGCGACACCCGCA
 AGTGGACTTTAGTGGCCATGAGCTGCTCAACACGGAGGGCCTCTCAAGCTGGTGAACCCGCTGAAGCA
 CGGCATCGTGGTGGACTGGGACTGCGTGCAAGGACATCTGGGAGTACATCTCCGCACCGCCATGAAGATC
 CTCGCCGAGGAGCAGCTGTGCTGGTCTCCGACCTCCGCTCAGCCCCAGCAGCAACCGGAGAAGTACG
 CGGAGCTCATGTTTGAGACCTTCGGCATCCCAGCCATGCACGTGACGTCCAGTCCGTTGCTGTCATCTA
 CTCCTACGGCAAGACCTCGGGCTGGTGGTGGAGAGCGGGCAGCGCTCTCGCACGTGGTGGCCATATCC
 GAGGGCGACGTGCTGCCGGGCTGACCAGCCGCGCGACTACGCTGGGGTGACCTACCAACTACCTGA
 TGCAGTGCTCAATGAGGCGGGCCACGCATTACGGACGACCACCTGCACATCATAGAGCACATCAAGAA
 GAAGTGTGCTATGCGGCCTTCTGCCCGAGGAGAGCTGGGCCCTGGTCCCGAGGAGCTGCGCGTGGAC
 TACGAGCTCCCGACGGCAAACATCACCATTGGCCAGGAGCGTTCCGTTGCTCTGAGATGCTCTTCC
 AGCCCTCCCTGGCAGGCAGCACCCAGCCGGGCTCCCGGAGCTCACAGCTGCCTGCCTGGGCCGCTGCCA
 GGACACGGGCTTCAAGGAGGAGATGGCCGCAACGTGCTACTGTGTGGCGCTGCACTATGCTGGATGGC
 TTCCCGAGCGCTTCCAGAGGGAGCTGAGCCTCTCTGCCCGGGGACAGCCCTGCAGTGGCTGCCGCTC
 CTGAGAGGAAGACCTCCGTGTGGACCGCGGTTCCATCTGGCCTCCCTGCAGGCCTTCAACAGCTCTG
 GGTGAGCAAGGAAGATTTGAGGAGCGGGCAGCGTGGCCATCTACAGCAAGTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG207474 representing NM_006686
 Red=Cloning site Green=Tags(s)

MATRNPMPLGTAQGDPEAGTRPGDASLRDTGAATQLKMKPRKVHKIKAVIIDLGSQYCKGCGYAGEPR
 PTYFISSTVGRKCPAAADAGDTRKWTLVGHELLNTEAPLKLVNPLKHGIVVDWDCVQDIWEYIFRTAMKI
 LPEEHAVLVSDPPLSPSSNREKYAELMFETFGIPAMHVTSQSLLSIYSYGKTSGLVVESEGHVSHVVPIS
 EGDVLPGLTSRADYAGDGLTNYLMQLLNEAGHAFDDHLHIIIEHIKKKCCYAAFLPEEELGLVPEELRVD
 YELPDGKLIIGQERFRCSEMLFQPSLAGSTQPLPELTAACLGRCDTGFKEEMAANVLLCGGCTMLDG
 FPERFQRELSLLCPGDSPAVAAAAPERKTSVWTGGSILASLQAFQQLWVSKEEFEERGSVAIYSK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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_006686.2](#), [NP_006677.1](#)

RefSeq Size: 1339 bp

RefSeq ORF: 1248 bp

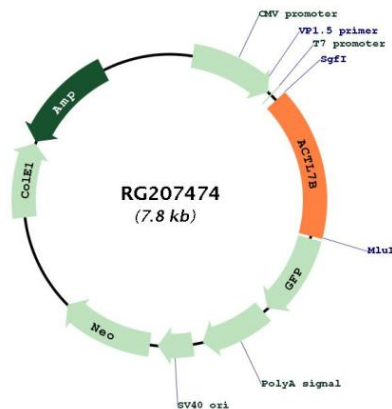
Locus ID: 10880

UniProt ID: [Q9Y614](#)

Cytogenetics: 9q31.3

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 RG207474