

## Product datasheet for **SC122757**

### ACTL7B (NM\_006686) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** ACTL7B (NM\_006686) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** ACTL7B  
**Synonyms:** Tact1  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL5  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_006686 edited  
GGGCTCTAGGCTGTGGATGTGAGAAGGGGAGCAAGGGAGGCAGATGGCGACAAGGAACAG  
CCCCATGCCCTGGGCACGGCTCAGGGTGACCCCTGGAGAGGCAGGAACACGGCCCGGCC  
TGACGCCAGCCTCCGGGACACAGGTGCGGCCACTCAGCTCAAGATGAAGCCAGGAAGGT  
GCACAAGATCAAGGCGGTATCATCGACCTGGGCTCCCAGTACTGCAAGTGCGGCTACGC  
GGGAGAGCCGAGGCCACCTACTTCATCTCCTCCACCGTGGGCAAACGCTGCCCGAGGC  
GGCCGACGCTGGCGACACCCGCAAGTGGACTTTAGTGGGCCATGAGCTGCTCAACACGGA  
GGCGCCTCTCAAGCTGGTGAACCCGCTGAAGCACGGCATCGTGGTGGACTGGACTGCGT  
GCAGGACATCTGGGAGTACATCTCCGCACCGCCATGAAGATCCTCCCGAGGAGCACGC  
TGTGCTGGTCTCCGACCCTCCGCTCAGCCCGAGCAGCAACCGGGAGAAGTACGCGGAGCT  
CATGTTTGAGACCTTCGGCATCCAGCCATGCACGTGACGTCCCAGTCGTTGCTGTCCAT  
CTACTCCTACGGCAAGACCTCCGGGCTGGTGGTGGAGAGCGGGCACGGCGTCTCGCACGT  
GGTGCCCATATCCGAGGGCGACGTGCTGCCGGGCTGACCAGCCGCGCCGACTACGCTGG  
GGTGACCTACCAACTACCTGATGCAGCTGCTCAATGAGGCGGGCCACGCATTCACGGA  
CGACCACCTGCACATCATAGAGCACATCAAGAAGAAGTGTGCTATGCGGCCCTCCTGCC  
CGAGGAGGAGCTGGGCTGGTCCCGAGGAGCTGCGCGTGGACTACGAGCTCCCGACGG  
CAAATCATCACCATTGGCCAGGAGCGCTTCCGTTGCTCTGAGATGCTCTCCAGCCCTC  
CCTGGCAGGCAGCACCCAGCCGGGCTCCCGGAGCTCACAGCTGCCTGCCTGGGCCGCTG  
CCAGGACACGGGCTTCAAGGAGGAGATGGCCGCCAACGTGCTACTGTGTGGCGGCTGCAC  
TATGCTGGATGGCTTCCCGAGCGCTTCCAGAGGAGCTGAGCCTCCTCTGCCCGGGGA  
CAGCCCTGCAGTGGCTGCCGCTCCTGAGAGGAAGACCTCCGTGTGGACCGCGGTTCCAT  
CCTGGCCTCCCTGCAGGCCTTCCAACAGCTCTGGGTGAGCAAGGAAGAGTTTGAGGAGCG  
GGGCAGCGTGGCCATCTACAGCAAGTGTGAGCCTCGGCATTTCCACAGACAAGGCCTCC  
AGCACAGATGGCCACAGGCCTCTCTATACACATTTACAGAATTTACATAAAGGTTTACT  
CTGAAATGGAAA  
AAAAAAAAAAAAA



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_006686 unedited NNNNCCAGTTCAGTTTTGTATACGACTCATATAGGCGGCCGCGATTCCCGGTTGGGCTCT AGGCTGTGGATGTGAGAAGGGGAGCAAGGGAGGCAGATGGCGACAAGGAACAGCCCCATG CCCCTGGGCACGGCTCAGGGTGACCCTGGAGAGGCAGGAACACGGCCCGGCCCTGACGCC AGCCTCCGGGACACAGGTGCGGCCACTCAGCTCAAGATGAAGCCAGGAAGGTGCACAAG ATCAAGGCGGTATCATCGACCTGGGCTCCCAGTACTGCAAGTGGCGCTACGCGGGAGAG CCGAGGCCACCTACTTCATCTCCTCCACCGTGGGCAAACGCTGCCCCGAGGCGGCCGAC GCTGGCGACACCCGCAAGTGGACTTTAGTGGGCCATGAGCTGCTCAACACGGAGGCGCCT CTCAAGCTGGTGAACCCGCTGAAGCACGCGCATCGTGGTGGACTGGGACTGCGTGCAGGAC ATCTGGGAGTACATCTTCCGACCCGCCATGAAGATCCTCCCGAGGAGCACGCTGTGCTG GTCTCCGACCCTCCGCTCAGCCCCAGCAGCAACCGGGAGAAGTACGCGGAGCTCATGTTT GAGACCTTCGGCATCCCAGCCATGCACGTGACGTCCCAGTCGTTGCTGTCCATCTACTCC TACGGCAAGACCTCGGGGCTGGTGGTGGAGAGCGGGCACGGCGTCTCGCACGTGGTGCC ATATCCGAGGGCGACGTGCTGCCGGCCTGACCAGCCGCGCCGACTACGCTGGGGGTGAC CTCACCAACTACCTGATGCAGCTGCTCAATGAGGCGGGCCACGCATTACGGACGACCAC CTGCACATCATAGACACATCAAGAAGAAGTGC
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_006686
<b>Insert Size:</b>	1453 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_006686.2</a> , <a href="#">NP_006677.1</a>
<b>RefSeq Size:</b>	1339 bp
<b>RefSeq ORF:</b>	1248 bp
<b>Locus ID:</b>	10880
<b>UniProt ID:</b>	<a href="#">Q9Y614</a>
<b>Cytogenetics:</b>	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]