

## Product datasheet for **MC227590**

### Actr3 (NM\_001205385) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Actr3 (NM\_001205385) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Actr3  
**Synonyms:** 1200003A09Rik; Arp3  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC227590 representing NM\_001205385  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCGGGACGGCTGCCGGCCTGTGTGGTGGACTGTGGCACGGGATATACAAAAGTAGGATATGCTGGAA  
ATACAGAGCCACAGTTTATCATCCCATCATGTATTGCCATTAAGAGTCTGCAAAAGTGGGTGACCAAGC  
CCAGAGGAGGGTATGAAAGGCGTGGATGACCTAGACTTCTTCATTGGTATGAAGCAATAGAAAAGCC  
ACATATGCAACAAAGTGGCAATTCGCCATGGTATAGTTGAAGACTGGGACTTAATGGAAGGTTTATGG  
AGCAAGTGATTTTTAAATATTTAAGGGCAGAACCTGAAGATCATTACTTTCTTTTACTGAACTCCACT  
GAATACTCCAGAAAACAGGGAATATACTGCTGAAATAATGTTTGAATCCTTCAATGTTCCAGGCTGTGAC  
ATTGCTGTGCAGGCTGTTCTTGCCTTAGCTGCATCCTGGACCTCAAGACAAGTAGGAGAGCGGACGCTGA  
CGGTACAGTAATAGACAGTGGAGACGGAGTCACTCATGTCATTCTGTGGCTGAAGGATATGTTATCGG  
CAGCTGTATTAACACATTCCAATCGCAGGAAGAGATAAACATATTTTATTCAGCAACTGCTGCGAGAC  
CGAGAAGTAGGAATCCCTCCTGAGCAGTCTTGGAACTGCGAAAGCAGTGAAGGAACGCTACAGTTATG  
TCTGCCAGATTTAGTAAAAGAGTTTAAACAAGTATGACACCGATGGGTCAAAGTGGATCAAACAGTACAC  
CGGAGTCAACGCCATCTCAAAGAAAGAGTTTTCTATTGATGTTGGCTATGAGCGATTCTGGGACCCGAG  
ATCTTTTTCCATCCAGAGTTTGCTAATCCAGATTTTACACAACCTATCTCAGAAGTTGTAGATGAAGTCA  
TTCAGAATTGCCCATGATGTCCGGCCTCTCTACAAGAACATTGTCTCTCTGGTGGTTCAACCAT  
GTTCCAGGACTTTGGACGTCGTTTGCAAAGAGATTTGAAGAGAAGTGTAGATGCCAGGCTGAAGTTAAGC  
GAGGAGCTGAGTGGTGGTAGATTGAAGCCCAAGCCTATTGATGTACAAGTTATTACACCATATGCAGC  
GGTATGCAGTCTGGTTGGAGGGTCAATGCTGGCTCCACGCCTGAGTTCTACCAAGTATGCCACACCAA  
AAAGGATTATGAAGAAATTGGACCTAGCATTGTCGTCACAATCCAGTGTGGAGTCATGCTC**TAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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|                               |  |
|-------------------------------|--|
| <b>Restriction Sites:</b>     | Sgfl-Mlul  |
| <b>ACCN:</b>                  | NM_001205385   |
| <b>Insert Size:</b>           | 1257 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>OTI Annotation:</b>        | Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.   |
| <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>                | <u><a href="#">NM_001205385.1</a></u> , <u><a href="#">NP_001192314.1</a></u>  |
| <b>RefSeq Size:</b>           | 2554 bp  |
| <b>RefSeq ORF:</b>            | 1257 bp  |
| <b>Locus ID:</b>              | 74117  |
| <b>UniProt ID:</b>            | <u><a href="#">Q99JY9</a></u>  |
| <b>Cytogenetics:</b>          | 1 E2.3   |
| <b>Gene Summary:</b>          | <p>ATP-binding component of the Arp2/3 complex, a multiprotein complex that mediates actin polymerization upon stimulation by nucleation-promoting factor (NPF). The Arp2/3 complex mediates the formation of branched actin networks in the cytoplasm, providing the force for cell motility. Seems to contact the pointed end of the daughter actin filament. In addition to its role in the cytoplasmic cytoskeleton, the Arp2/3 complex also promotes actin polymerization in the nucleus, thereby regulating gene transcription and repair of damaged DNA. The Arp2/3 complex promotes homologous recombination (HR) repair in response to DNA damage by promoting nuclear actin polymerization, leading to drive motility of double-strand breaks (DSBs). Plays a role in ciliogenesis.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1. Variants 1, 2 and 3 encode the same protein. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p> |