

## Product datasheet for RN215414

### Acd (NM\_001037193) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Acd (NM_001037193) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Acd
Synonyms:	MGC116400
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN215414 representing NM_001037193 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGAATTCAGGGAGGCTGGTCTGCGTCCCTGGATTCGAGAGCTGATCCTGGGCTCAGAAACTGT  
CAAGTCCACAAGCCGGTCATCTGCTCAAGGACTCCAGGACTCGGAGACTCCGGGCCATCTCCGCCCC  
TGACACACCTGACACCGGGCCGTGTTACTTGTGTCAGATGGAATCATAGTGTCCGATGCGTGGTGACG  
CGTAATGCCATCGACACCTCTGACTGGGAGGAGAAGGAGTTCGGATCCGTGGGACCGAGGGCCGGCTCC  
TGCTGTCGAGGCGTGGGGCTCCGCATTCAGGTGGCTCAGGACTATGCGCCTGCGGAGTCTACCTCCA  
GGTGGATCGCTTTAACCTGCTGCCACGGAGCAGCCCCGGGTACAGGTGACTGGTTGCAATCAGGATTC  
GATGTGCAGAAAAAGCTCAATAAATGCCTTGAGGACCCTCTCTGAGTCTGCTTCTCCAGTGCAGGCT  
TAACCTGTCTCAGTCTTGATGAGGTGAAGGAAGACGGGGATCATCGGGGAGCACTAGTGCCTAGC  
TGAGAGCTGCCTAGTGTACAAGGTCCTTACAGCAAGACCCCTCACGCACTGGGCTACCTCTTGCTCC  
CAGGCCACGGAAGAAGCTGTGTTACCGTGCCTAGTTTCTACTGCACATCTCTGAGAATGAGGAACAAA  
TTCTGAGTCTATAGACTCAAGTCAGAAGGCACAGGAAAACCCGCTTCTCCAGCCTCATGCCACAGGA  
GGAAAGCGGTGCCAGTGTAGCCTTCTGTCAGCCTTCCCACATCAGACCCCGGGCAGAAGGACAACCTCC  
CAGCCTCCGCCAAGTGTGCTCAACCTCCCCAAGAGCTCAGGCCCCAGTTCTACCCCTGCAGTTCTA  
CACCCAGCTCCCACTCTTGACCTGCAGCCCCAGTCTCTACCCCTTCGACATGCCCTACTTCAATACCA  
GGCCTGTGAGACCAGAACCAGTTTCATAAGCTAGAGTTCAGGGAGCTCCAGTGGCCATCAAAAAGCAGG  
CAGCTTCTCCCAAGAACCAGGAGCCAGGAGCCCCACTCTGTCTGGGAACCCAGAGAGGCATCGTGATA  
CTTCTGCATTCCAGTATAAATATGGGACACCCTCTGCCTCCCTCCATACCCAGGTCCAACTGCCAGGCT  
CTCTCTCAGCTTGTAGCTTGGGCCTTGAACATAGTGATGGAGTCTGAGTTACCACAGGT**TGA**

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA



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<b>Restriction Sites:</b>	Sgfl-RsrII
<b>ACCN:</b>	NM_001037193
<b>Insert Size:</b>	1254 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>	<u>NM_001037193.1</u> , <u>NP_001032270.1</u>
<b>RefSeq Size:</b>	1401 bp
<b>RefSeq ORF:</b>	1254 bp
<b>Locus ID:</b>	307798
<b>UniProt ID:</b>	<u>Q4FZR5</u>
<b>Cytogenetics:</b>	19q12
<b>Gene Summary:</b>	Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded TTAGGG repeats added by telomerase and protects chromosome ends. Without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways. Promotes binding of POT1 to single-stranded telomeric DNA. Modulates the inhibitory effects of POT1 on telomere elongation. The ACD-POT1 heterodimer enhances telomere elongation by recruiting telomerase to telomeres and increasing its processivity. May play a role in organogenesis.[UniProtKB/Swiss-Prot Function]