

## Product datasheet for **RC238960**

### Artemis (DCLRE1C) (NM\_001289078) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Artemis (DCLRE1C) (NM_001289078) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Artemis
Synonyms:	A-SCID; DCLREC1C; RS-SCID; SCIDA; SNM1C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC238960 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAAGCATCAGGAGAGTTTTTATTTTCAGGGCAATAATGGAAGTGTCTGTACACAGGAGACTTCAGT  
 TGGCGCAAGGAGAAGCTGCTAGAATGGAGCTTCTGCACCTCGGGGCGAGAGTCAAAGACATCCAAAGTGT  
 ATATTTGGATACTACGTTCTGTGATCCAAGATTTACCAATTCGAAGTGGGAGGAGTGTAAAGTGGG  
 GTCTTAGAGCTGGTCCGAAGCTGGATCACTCGGAGCCCGTACCATGTTGTGTGGTGAAGTGCAGGAGCGG  
 CTTATGGCTATGAATATCTGTTACCAACCTTAGTGAAGAATTAGGAGTCCAGGTTTATGTGAATAAGCT  
 AGACATGTTTAGGAACATGCCTGAGATCCTTCATCATCTCACAACAGACCGCAACACTCAGATCCATGCA  
 TGCCGGCATCCCAAGGCAGAGGAATATTTTCAGTGGAGCAAATACCTGTGGAATTACTCCAGAAATA  
 GAATCCACTCCACATAATCAGCATTAAAGCATCCACCATGTGGTTTGGAGAAAGGAGCAGAAAAACAA  
 TGTAATTGTGAGGACTGGAGAGAGTTCATACAGAGCTTGTCTTTCTTTCTACTCCTCTACAGTGAAGT  
 AAAGATTTCTTGAGCTACCTCTGTCTGTGAACGCATATCCAAATGTCATTCCAGTTGGCACAACACTATGG  
 ATAAAGTTGTGCGAAATCTTAAAGCCTTTATGCCGGTCTTCCCAAAGTACGGAGCCAAAGTATAAACCCT  
 GGGAAAATGAAGAGAGCTAGAACAGTTACCGAGACTCAGAGGAGGAAGATGACTATCTCTTTGATGAT  
 CCTCTGCCAATACCTTTAAGGCACAAAGTCCATACCCGAAACTTTTCCACCTGAGGATTTTTCAATGA  
 CTGCAGTATCAGAAAAGCAGCCTGAAAAGTGAAGCAACCCAGGATGCTGCAGAGCAGAGTGTATGCA  
 GAGCTCTCGTTTCAAACTTTGTAGATTGTGAAGAATCCAACAGTGAAGTGAAGAAGAAGTAGGAATC  
 CCAGTCTACTGCAAGGAGATCTGGGCTGTACTTCACTGCAAAAGGCTGATGGGGATGTACCCAGT  
 GGAAGTATTCTTTAAAGAAATGATGAAATCACAGATGAGAGTTGGAAAATCCCTCTCCACAGT  
 GGCAGGGGATCTCAGTACCAAGCTTTTCAGTGAAGTCTGATGGAGAATCAACTCACATCTCTCCAG  
 AATTTCTCCAGTCAACACATAACAGAACAAGGAAGTCAAGGCTGGGACAGCCAACTGATACTGTTT  
 TGTATCTTCCAAAGAGAGAAAAGTGGGATATTACTTCTTGGACAAAGCTGACTACAGACCAACAAT  
 CAAAGAGAATATCTGCCTCTCTCATGGAACAAATGTAATTTGCCAAAGGATACTTACTCTGATTTG  
 AAAAGCAGAGATAAAGATGTGACAATAGTTCTAGTACTGGAGAACAATACTTAAGCAGTGAAGACAC  
 ATATACCCGAGGAAAAAGTTTGTAACTTAGCACAAATGCAGATCCAGAGCTCTTCTGATTTTGA  
 AGTTCCCTCAACTCCAGAAGCTGAGTTACCTAAACGAGAGCATTACAATATTTATATGAGAAGCTGGCA  
 ACTGGTGAGAGTATAGCAGTCAAAAAAGAAAATGCTCACTCTTAGATACC

**ACGCGT**ACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238960 protein sequence  
 Red=Cloning site Green=Tags(s)

MKHQERFLFQGNNGTVLYTGDFRLAQGEAARMELLHSGGRVKDIQSVYLDTTFCDFPRFYQIPSREECLSG  
 VLELVRSWITRSPYHVWLNCKAAYGYEYLFNLSEELGVQVHVNKLDMFRNMPPEILHHLTDRNTQIHA  
 CRHPKAEYFQWSKLPAGITSRNRIPLHIISIKPSTMWFGERSRKTNVIVRTGESSYRACFSFHSSYSEI  
 KDFLSYLCVNAYPNVIPTGTTMDKVVEILKPLCRSSQSTEPKYKPLGKLRARTVHRDSEEDDYLFD  
 PLPIPLRHKVPYPETFHPEVFSMTAVSEKQPEKLRQTPGCCRAECMQSSRF TNFVDCESNSESEEEVGI  
 PASLQGDLSVLHLQKADGDVPQWEVFFKRNDITDESLENFSSSTVAGGSQSPKLFSDSDGESTHISQ  
 NSSQSTHITTEQGSQGWSDTSLSSQERNSGDITSLDKADYRPTIKENIPASLMEQNVICPKDYSDL  
 KSRDKDVTIVPSTGEPTLSSETHIPEEKSLNLSNADSQSSSDFEVPSTPEAELPKREHLQYL YEKLA  
 TGESIAVKKRKCLLDT

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6128\\_g04.zip](https://cdn.origene.com/chromatograms/mk6128_g04.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001289078

**ORF Size:** 1731 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\\_001289078.2](#)

**RefSeq Size:** 6190 bp

**RefSeq ORF:** 1734 bp

**Locus ID:** 64421

**UniProt ID:** [Q96SD1](#)

**Cytogenetics:** 10p13

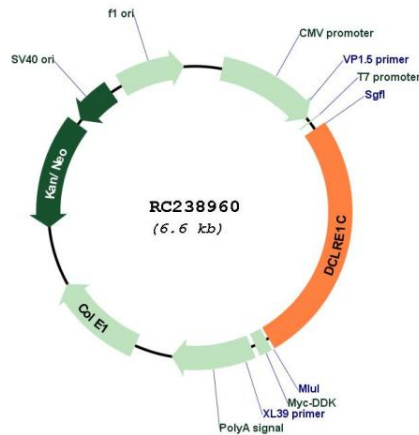
**Protein Families:** Druggable Genome

**Protein Pathways:** Cell cycle, Non-homologous end-joining, Primary immunodeficiency

**MW:** 65.3 kDa

**Gene Summary:** This gene encodes a nuclear protein that is involved in V(D)J recombination and DNA repair. The encoded protein has single-strand-specific 5'-3' exonuclease activity; it also exhibits endonuclease activity on 5' and 3' overhangs and hairpins. The protein also functions in the regulation of the cell cycle in response to DNA damage. Mutations in this gene can cause Athabaskan-type severe combined immunodeficiency (SCIDA) and Omenn syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

**Product images:**



Circular map for RC238960