

Product datasheet for **RC238936**

Artemis (DCLRE1C) (NM_001289077) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Artemis (DCLRE1C) (NM_001289077) 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:

>RC238936 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTTTTATTTACAGGGCAATAATGGAAGTGTCTGTACACAGGAGACTTCAGATTGGCGCAAGGAGAAG
 CTGCTAGAATGGAGCTTCTGCACTCCGGGGCAGAGTCAAAGACATCCAAAGTGATATTTGGATACTAC
 GTTCTGTGATCCAAGATTTTACCAAATTCAGTCCGGGAGGAGTGTAAAGTGGAGTCTTAGAGCTGGTC
 CGAAGCTGGATCACTCGGAGCCCGTACCATGTTGTGTGGCTGAAGTCAAAGCGGCTTAGGCTATGAAT
 ATCTGTTACCAACCTTAGTGAAGAATTAGGAGTCCAGTTTATGTGAATAAGCTAGACATGTTTAGGAA
 CATGCCTGAGATCTTCATCATCTCACACAGACCCGCAACTCAGATCCATGCATGCCGGCATCCCAAG
 GCAGAGGAATATTTTTCAGTGGAGCAAATACCCTGTGGAATTACTCCAGAAATAGAATCCACTCCACA
 TAATCAGCATTAAAGCCATCCACCATGTGGTTTGGAGAAAGGAGCAGAAAAACAAATGTAATTGTGAGGAC
 TGGAGAGAGTTTACACAGAGCTGTTTTCTTTTCACTCCTCCTACAGTGAAGATTAAAGATTTCTTGAGC
 TACCTCTGTCCTGTGAACGCATATCCAAATGTCATTCCAGTTGGCACAACATATGGATAAAGTTGTGAAA
 TCTTAAAGCCTTTATGCCGGTCTTCCCAAAGTACGGAGCCAAAGTATAAACCACTGGGAAAACTGAAGAG
 AGCTAGAACAGTTCACCGAGACTCAGAGGAGGAAGATGACTATCTCTTTGATGATCCTCTGCCAATACCT
 TTAAGGCACAAAGTTCCATACCCGAAACTTTTACCCTGAGGTATTTCAATGACTGCAGTATCAGAAA
 AGCAGCCTGAAAACTGAGACAAACCCAGGATGCTGCAGAGCAGAGTGTATGCAGAGCTCTCGTTTAC
 AAATTTGTAGATTGTGAAGAATCCAACAGTAAAAGTGAAGAAGAAGTAGGAATCCAGCTTCACTGCAA
 GGAGACTGGGCTCTGTACTTCACTGCAAAAGGCTGATGGGGATGTACCCAGTGGGAAGTATTTCTTA
 AAAGAAATGATGAAATCACAGATGAGAGTTTGGAAAACTCCCTTCTCCACAGTGGCAGGGGATCTCA
 GTACCAAAGCTTTTTCAGTACTCTGATGGAAATCAACTCACATCTCCTCCAGAAATTTCCAGTCA
 ACACACATAACAGAACAAGGAAGTCAAGGCTGGGACAGCCAATCTGATACTGTTTTGTTATCTTCCAAAG
 AGAGAAACAGTGGGGATATTACTTCTTGGACAAAGCTGACTACAGACCAACAATCAAAGAGAATATTCC
 TGCCTCTCTCATGGAACAAAATGTAATTTGCCAAAGGATACTTACTCTGATTTGAAAAGCAGAGATAAA
 GATGTGACAATAGTTCCTAGTACTGGAGAACCAACTACTTAAGCAGTGAACACATATACCCGAGGAAA
 AAAGTTTGCTAAATCTTAGCACAATGCAGATTCAGAGCTCTCTGATTTGAAAGTCCCTCACTCC
 AGAAGCTGAGTTACCTAAACGAGAGCATTACAATATTTATATGAGAAGCTGGCAACTGGTGAAGTATA
 GCAGTCAAAAAAGAAAATGCTCACTCTTAGATACC

ACGCGTACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238936 protein sequence
 Red=Cloning site Green=Tags(s)

MFLFQGNNGTVLYTGFRLAQGEAARMELLHSGGRVKDIQSVYLDTTFCDFRPFYQIPSREECLSGVLELV
 RSWITRSPYHVWLNCKAAYGYEYLFNTLSEELGVQVHVNKLDMFRNMPEILHHLTDRNTQIHACRHPK
 AEEYFQWSKLPAGITSRNRIPLHIIISIKPSTMWFGERSRKTNVIVRTGESSYRACFSFHSSYSEIKDFLS
 YLCPVNAVNPVIVPGTTMDKVVILKPLCRSSQSTEPKYKPLGKLRARTVHRDSEEEEDDYLFDPLPIP
 LRHKVPYPETFHPEVFSMTAVSEKQPEKLRQTPGCCRAECMQSSRFTNFVDCEESNSESEEEVGIASLQ
 GDLGVLHLQKADGVPQWEVFKRNDITDESLENFSSVAGGSQSPKLFSDSDGESTHISSQNSQS
 THITEQGSQGWSDT VLLSSQERNSGDITSLDKADYRPTIKENIPASLMEQNVICPKDYSDLKSRDK
 DVTIVPSTGEPTLSSETHIPEEKSLNLSTNADSQSSSDFEVPSTPEAELPKREHLQYL YEKLATGESI
 AVKKRKCSSLDT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8067_h06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001289077

ORF Size: 1716 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_001289077.2](#)

RefSeq Size: 6429 bp

RefSeq ORF: 1719 bp

Locus ID: 64421

UniProt ID: [Q96SD1](#)

Cytogenetics: 10p13

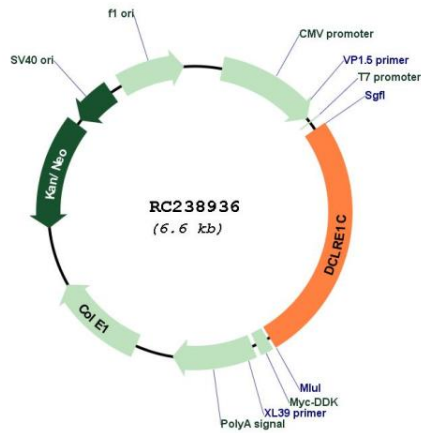
Protein Families: Druggable Genome

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

MW: 64.7 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 RC238936