

Product datasheet for **RC214185**

Artemis (DCLRE1C) (NM_001033855) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Artemis (DCLRE1C) (NM_001033855) 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)



[View online »](#)

ORF Nucleotide
Sequence:

>RC214185 representing NM_001033855
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTTCCTTTTCGAGGGCAGATGGCCGAGTATCCAACATCTCCATAGACCGCTTCGATAGGGAGAACC
TGAGGGCCCGCGCTACTTCCTGTCCCCTGCCACAAAGATCACATGAAAGGATTAAGAGCCCTACCTT
GAAAAGAAGTTGGAGTGCAGCTTGAAGGTTTATCTATACTGTTACCTGTGACTAAGGAGTTGTTGTTA
ACGAGCCCGAAATACAGATTTTGAAGAACAATATATCTATTGAAATCGAGACTCTACCCAGATAT
CTTTAGTGGATGAAGCATCAGGAGAGAAGGAGATTGTTGTGACTCTTACCAGCTGGTCACTGTCC
GGGATCAGTTATGTTTTATTTACAGGCAATAATGGAAGTGTCTGTACACAGGAGACTTCAGATTGGCC
CAAGGAGAAGCTGCTAGAATGGAGCTTCTGCACCTCCGGGGCAGAGTCAAAGACATCCAAAGTGTATATT
TGGATACTACGTTCTGTGATCCAAGATTTACCAAATTCAGTCCGGGAGGAGTGTAAAGTGGAGTCTT
AGAGCTGGTCCGAAGCTGGATCACTCGGAGCCCGTACCATGTTGTGTGGCTGAACTGCAAAGCGGCTTAT
GGCTATGAATATCTGTTACCAACCTTAGTGAAGAATTAGGAGTCCAGGTTTCATGTGAATAAGCTAGACA
TGTTTAGGAACATGCCTGAGATCCTTCATCATCTCACAACAGACCCGAACACTCAGATCCATGCATGCCG
GCATCCCAAGGCAGAGGAATATTTTCAGTGGAGCAAATACCCTGTGGAATTACTTCAGAAATAGAATT
CCACTCCACATAATCAGCATTAAAGCCATCCACCATGTGGTTTGGAGAAAGGAGCAGAAAAACAAATGTAA
TTGTGAGGACTGGAGAGATTACACAGAGCTTGTTTTTCTTTTCACTCCTCCTACAGTGAGATTAAGA
TTTCTTGAGCTACCTCTGTCTGTGAACGCATATCCAAATGTATTCCAGTTGGCACAACATAGGATAAA
GTTGTGCAAACTCTAAAGCCTTTATGCCGGTCTTCCCAAAGTACGGAGCCAAAGTATAAACCAGTGGGAA
AACTGAAGAGAGCTAGAACAAGTTCACCGAGACTCAGAGGAGGAAGATGACTATCTCTTTGATGATCCTCT
GCCAATACCTTTAAGGCACAAAGTTCATACCCGAAACTTTTACCCTGAGGTATTTTCAATGACTGCA
GTATCAGAAAAGCAGCCTGAAAACTGAGACAAACCCAGGATGCTGCAGAGCAGAGTGTATGCAGAGCT
CTCGTTTCAAAACTTTGTAGATTGTGAAGAATCCAACAGTGAAGTGAAGAAGAAGTAGGAATCCAGC
TTCAGTCAAGGAGATCTGGGCTCTGTACTTACCTGCAAAGGCTGATGGGGATGTACCCAGTGGGAA
GTATTCTTTAAAAGAAATGATGAAATCACAGATGAGAGTTTGGAAAACCTCCCTTCTCCACAGTGGCAG
GGGATCTCAGTACCAAAGCTTTTCAGTACTCTGATGGAGAATCAACTCACATCTCTCCAGAAATTC
TTCCAGTCAACACACATAACAGAACAAGGAAGTCAAGGCTGGGACAGCCAATCTGATACTGTTTGTTA
TCTTCCAAAGAGAGAAACAGTGGGATATTACTTCTTGGACAAAGCTGACTACAGACCAACAATCAAAG
AGAATATTCTGCCTCTCTCATGGAACAAAATGTAATTTGCCCAAAGGATACTTACTCTGATTTGAAAAG
CAGAGATAAAGATGTGACAATAGTTCTAGTACTGGAGAACCAACTACTTAAGCAGTGAGACACATATA
CCCAGGAAAAAGTTTGCTAAATCTTAGCACAAATGCAGATTCCAGAGCTCTTCTGATTTTGAAGTTC
CCTCAACTCCAGAAGCTGAGTTACCTAAACGAGAGCATTACAATATTTATAGAGAAGCTGGCAACTGG
TGAGAGTATAGCAGTCAAAAAAGAAAATGCTCACTCTTAGATACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214185 representing NM_001033855
 Red=Cloning site Green=Tags(s)

MSSFEGQMAEYPTISIDRFDRENLRARAYFLSHCHKDHMKGLRAPTLKRRLECSLKVLYLCSPVTKELL
 TSPKYRFWKKRIISIEIETPTQISLVDEASGEKEEIVVTLIPAGHCPGSMFLFQGNNGTVLYTGDFRLA
 QGEAARMELLHSGGRVKDIQSVYLDTTFCDFRYQIPSRREECLSGVLELVRSWITRSPYHVWLNCKAAY
 GYEYLFNTLSEELGVQVHVNKLDMFRNMP EILHHLTDRNTQIHACRHPKAE EYFQWSKLP CGITSRNRI
 PLHIISIKPSTMWFGERSRKTNIIVRTGESSYRACFSFHSSYSEIKDFLSYLCPVNAYPNVIPVGTMDK
 VVEILKPLCRSSQSTEPKYKPLGKLRARTVHRDSEEDDYLFDDPLPIPLRHKVPYPETFHPEVFSMTA
 VSEKQPEKLRQTPGCCRAECMQSSRFTNFVDCEESNSESEEEVGPASLQGDGSLVHLKQADGDPQWE
 VFFKRNDEITDESLENFSPSTVAGGSQSPKLFSDSDGESTHISSQSSQSTHITEQGSQGWDSQSDTVLL
 SSQERNSGDITSLDKADYRPTIKENIPASLMEQNVICPKDYSDLKSRDKDVTIVPSTGEPTTSSETHI
 PEEKSLNLSTNADSQSSDFEVPSTPEAELPKREHLQYL YEKLATGESIAVKKRKC SLLDT

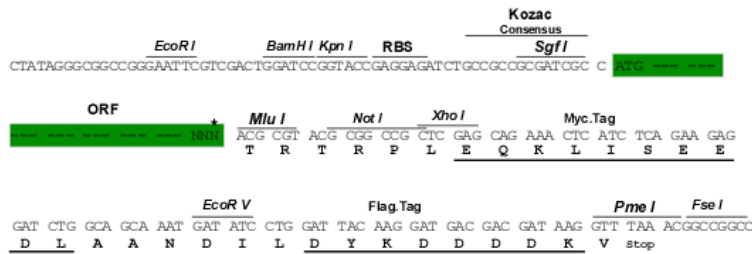
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8073_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001033855

ORF Size: 2076 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001033855.3](#)

RefSeq Size: 3701 bp

RefSeq ORF: 2079 bp

Locus ID: 64421

UniProt ID: [Q96SD1](#)

Cytogenetics: 10p13

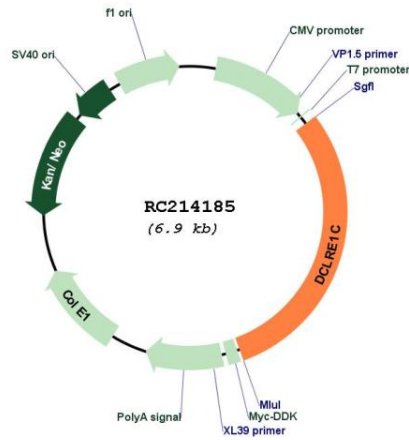
Protein Families: Druggable Genome

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

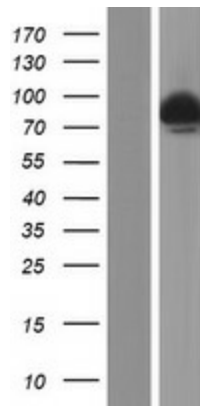
MW: 78.3 kDa

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 RC214185



Western blot validation of overexpression lysate (Cat# [LY422421]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214185 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).