

Product datasheet for **SC302772**

Artemis (DCLRE1C) (NM_001033855) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Artemis (DCLRE1C) (NM_001033855) Human Untagged Clone
Tag:	Tag Free
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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Fully Sequenced ORF: >NCBI ORF sequence for NM_001033855, the custom clone sequence may differ by one or more nucleotides

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ATGAGTTCCTTCGAGGGGCAGATGGCCGAGTATCCAACATCTCCATAGACCGCTTCGATAGGGAGAACC
TGAGGGCCCGCGCTACTTCCTGTCCCCTGCCACAAAGATCACATGAAAGGATTAAGAGCCCCTACCTT
GAAAAGAAGGTTGGAGTGCAGCTTGAAGGTTTATCTACTGTTACCTGTGACTAAGGAGTTGTTGTTA
ACGAGCCCGAAATACAGATTTTGAAGAAACGAATTATATCTATTGAAATCGAGACTCCTACCCAGATAT
CTTAGTGGATGAAGCATCAGGAGAGAAGGAAGAGATTGTTGTGACTCTCTTACCAGCTGGTCAGTGCC
GGGATCAGTTATGTTTTATTTTCAGGGCAATAATGAACTGTCCTGTACACAGGAGACTTCAGATTGGCG
CAAGGAGAAGCTGCTAGAATGGAGCTTCTGCACCTCCGGGGCAGAGTCAAAGACATCCAAAGTGATATT
TGGATACTACGTTCTGTGATCCAAGATTTTACCAAATCCAAGTCGGGAGGAGTGTAAAGTGGAGTCTT
AGAGCTGGTCCGAAGCTGGATCACTCGGAGCCCGTACCATGTTGTGTGGCTGAACTGCAAAGCGGCTTAT
GGCTATGAATATCTGTTACCAACCTTAGTGAAGAATTAGGAGTCCAGGTTTCATGTGAATAAGCTAGACA
TGTTTAGGAACATGCCTGAGATCCTTCATCATCTCACAACAGACCGCAACACTCAGATCCATGCATGCCG
GCATCCCAAGGCAGAGGAATATTTTCAGTGGAGCAAATACCCTGTGGAATTACTCCAGAAATAGAATT
CCTCCACATAATCAGCATTAAGCCATCCACCATGTGGTTTGGAGAAAGGAGCAGAAAAACAAATGTAA
TTGTGAGGACTGGAGAGATTACACAGAGCTGTTTTCTTTTCACTCCTCCTACAGTGAGATTAAGA
TTTTCTTGAGCTACCTCTGTCTGTGAACGCATATCCAAATGTCATTCCAGTTGGCACAACATATGGATAAA
GTTGTCGAAATCTTAAAGCCTTTATGCCGGTCTCCCAAAGTACGGAGCCAAAGTATAAACCCTGGGAA
AACTGAAGAGAGCTAGAACAGTTCACCGAGACTCAGAGGAGGAAGATGACTATCTCTTTGATGATCCTCT
GCCAATACCTTTAAGGCACAAAGTCCATACCCGAAACTTTTCCACCTGAGGTATTTCAATGACTGCA
GTATCAGAAAAGCAGCTGAAAACTGAGACAAACCCAGGATGCTGCAGAGCAGAGTGATGCAGAGCT
CTCGTTTTCAAACTTTGTAGATTGTGAAGAATCCAACAGTGAAGTGAAGAAGAAGTAGGAATCCAGC
TTCAGTCAAGGAGATCTGGCTCTGACTTCCCTGCAAAAGGCTGATGGGGATGTACCCAGTGGGAA
GTATTCTTTAAAAGAAATGATGAAATCACAGATGAGAGTTGGAAAACTCCCTCCTCCACAGTGGCAG
GGGGATCTCAGTCACCAAAGCTTTTTCAGTACTCTGATGGAGAATCAACTCACATCTCCTCCAGAAATC
TTCCAGTCAACACACATAACAGAACAAGGAAGTCAAGGCTGGGACAGCCAATCTGATACTGTTTTGTTA
TCTTCCCAAGAGAGAAACAGTGGGGATTTACTTCTTGGACAAAGCTGACTACAGACCAACAATCAAAG
AGAATATTCCTGCCTCTCTCATGGAACAAAATGTAATTTGCCCAAAGGATACTTACTCTGATTTGAAAAG
CAGAGATAAAGATGTGACAATAGTTCCTAGTACTGGAGAACCACTACTTAAGCAGTGAGACACATATA
CCCGAGGAAAAAGTTTGCTAAATCTTAGCACAATGCAGATTCAGAGCTCTTCTGATTTTGAAGTTC
CCTCAACTCCAGAAGCTGAGTTACCTAAACGAGAGCATTACAATATTTATATGAGAAGCTGGCAACTGG
TGAGAGTATAGCAGTCAAAAAAGAAAATGCTCACTCTTAGATACCTAA
    
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Restriction Sites: Please inquire
ACCN: NM_001033855

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.</p>
Components:	<p>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).</p>
Reconstitution Method:	<ol style="list-style-type: none"> 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:	<u>NM_001033855.1, NP_001029027.1</u>
RefSeq Size:	3701 bp
RefSeq ORF:	2079 bp
Locus ID:	64421
UniProt ID:	<u>Q96SD1</u>
Cytogenetics:	10p13
Protein Families:	Druggable Genome
Protein Pathways:	Cell cycle, Non-homologous end-joining, Primary immunodeficiency

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 Athabascan-type severe combined immunodeficiency (SCIDA) and Omenn syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014] Transcript Variant: This variant (a) encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.