

Product datasheet for **SC304421**

RTEL1 (NM_016434) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: RTEL1 (NM_016434) Human Untagged Clone
Tag: Tag Free
Symbol: RTEL1
Synonyms: C20orf41; DKCA4; DKCB5; NHL; PFBMFT3; RTEL
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for NM_016434, the custom clone sequence may differ by one or more nucleotides

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ATGCCCAAGATAGTCTGAATGGTGTGACCGTAGACTTCCTTTCCAGCCCTACAAATGC
CAACAGGAGTACATGACCAAGGTCCTGGAATGTCTGCAGCAGAAGGTGAATGGCATCCTG
GAGAGCCCTACGGGTACAGGGAAGACGCTGTGCCTGCTGTGCACCACGCTGGCCTGGCGA
GAACACCTCCGAGACGGCATCTCTGCCCGCAAGATTGCCGAGAGGGCGCAAGGAGAGCTT
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GCTTGCTACACGGACATCCCAAAGATTATTTACGCCTCCAGGACCCACTCGCAACTCACA
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CAGGTGCTGGAGGAGCAGACCAAGGCAGCGCAGCAGGGTGAAGCCACCCGGAGTTCAGC
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ACGCTGGCCCCGGTGTCTCCTTTGCTCTGGAGATGCAGATCCCTTTCCAGTCTGCCTG
GAGAACCACACATCATCGACAAGCACCAGATCTGGGTGGGGTTCGTCCTCCAGAGCCCC
GATGGAGCCCAGTTGAGCTCCGCGTTTGGACAGACGGTTTTCCGAGGAGTGCTTATCCTCC
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AAGATGGAGGCGCTGAAGCCGCTGTTTGTGGAGCCAGGAGCAAAGGCAGCTTCTCCGAG
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GCGGTCTGCCGGGCAAGGCCAGCGAGGGGCTGGACTTCTCAGACACGAATGGCCGTGGT
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CGTCCACACCACAAGCAGCGCTTCTCACAGACGTGCACAGACCTGACCGGCCGCCCTAC
CCGGGCATGGAGCCACCGGACCCAGGAGGAGGCTTCCCGTGCCTCTGTGCTTACC
CACAGGGTCCCCAACAGGCCCTCACGGTCCGAGAAGACCGGAAGACCCAGAGCAAG
ATCTCGTCTTCTTAGACAGAGGCCAGCAGGGACTGTGGGGCGGGCGGTGAGGATGCA
GGTCCCAGCCAGTCTCAGGACCTCCCCACGGCCTGCAGCATCTGAGTGGGGCCTCTAG
    
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- Restriction Sites:** Please inquire
- ACCN:** NM_016434
- OTI Disclaimer:** 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).
- OTI Annotation:** 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.
- 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_016434.2](#), [NP_057518.1](#)

RefSeq Size: 4462 bp

RefSeq ORF: 3660 bp

Locus ID: 51750

UniProt ID: [Q9NZ71](#)

Cytogenetics: 20q13.33

Protein Families: Druggable Genome

Gene Summary: This gene encodes a DNA helicase which functions in the stability, protection and elongation of telomeres and interacts with proteins in the shelterin complex known to protect telomeres during DNA replication. Mutations in this gene have been associated with dyskeratosis congenita and Hoyerall-Hreidarsson syndrome. Read-through transcription of this gene into the neighboring downstream gene, which encodes tumor necrosis factor receptor superfamily, member 6b, generates a non-coding transcript. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2013]
Transcript Variant: This variant (1) uses an alternate splice site in the 3' coding region that results in a translational frameshift, compared to variant 3. The resulting protein (isoform 1) has a distinct C-terminus and is shorter than isoform 3.