

Product datasheet for **KN214507RB**

RTEL1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: RFP-BSD

Symbol: RTEL1

Locus ID: 51750

Components: **KN214507G1**, RTEL1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGGCATTGTAGGGCTGGAA

KN214507G2, RTEL1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCCTGGAATGTCTGCAGC

KN214507RBD, donor DNA containing left and right homologous arms and RFP-BSD functional cassette.

Homologous arm and RFP-BSD sequences:

pUC vector backbone in gray; Left arm sequence in blue; RFP-BSD in green; Right arm in violet

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CTCCAGCCAG CCAGGAGGGC AGAGGGCTGG AGAGGCAGGG CCGGAGGTTC AGACCCTCCG CTCTGACGTT
GCGCCTGGTG AGGCCGGGAG GGGTGCCGCT TGCCTCTTCA GCCCTCACGC TCTTGTGGAA GTCGCGGAAT
TACTGCAGGC GGAACCTGCA GCACTGTGGG CGTCTTTTCC AGAGAAGGAC GGAGTTGTGG GCGGGGAGGA
TAAGGCAAGG CCCAGCCACT TCGCATCTTC GCCCCGCCAG CTCCTCGAGA TGGGATATAC CAGGGTTGCT
CTCCAACCTT CTCCGCAGGA GGGACTGATG GAAACGCCTG GGAAAGTAGC CCGGTACCCA CAAAGGCTGT
CTACAAACAG AGTCTTACTG TCTTTCCAG GTCTGTGCCA TAGGGATTCT CGAAGAGAAC AGCGTTGTGT
CCCAGTGAC ATGCTCGCAT CGTTACCAG GAGTGCCCGA GACCCTAAGA TGTTCCGAGT GGTTTTTTTCG
CACAGACCCG AATAGCCTGC CCCTCAGCCA CGCTCTGTGC CTTTCTGAGA ACAGGCTGAT AGGTAGAGCA
CAGGCCCGA GGAAAGGACT GCGGGTGGGT GGAGCTTCCG CCAGGACGGG GTGTGCTTCC CTCTCCCGGC
CCATTCCAGC CAGGCCCTC CGGGCCAGAG GCAGCGTCTG TCATAAAAAG GGCTGGTGTT CCAGGTGGGG
TCAGAGAGAG GATTGACAAG TAAAAACGAT CGTCCTTTGA AGGGGGCCGG CCCCTCCACA CCTGTGGGTA
TTTCTCATCA GCGGGGACGA GAGACTGAGA AAATGAATAA GACACAGAGA CAAAGTATAG AGAGAAAAGT
GGGCCAGGG GACCGCGCT CAGCATACAG AGGACCTGCA CCGGCACCAG TCTCTGAGTT TCCTCAGTAT
TCATTAATTA CTATTTTAC TATCTCAGCA AGAGGAATGC GGCAGGACAG CAAGGTGATA GTGGGGAGAA
GGTCAGCAAG AAAACGTGAG CAAAGGAATC TGGGTCACAA ATAAGTTCAA GGGAAGGTAC TATGCCTGGA
TGTGCACGTA GGCTAGTTTT ATGCTTTTCT CCACCCAAAC ATCTCGGTGG

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GE100003, scramble sequence in pCas-Guide vector



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Disclaimer: These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq: [NM_001283009](#), [NM_001283010](#), [NM_016434](#), [NM_032957](#)

UniProt ID: [Q9NZ71](#)

Synonyms: C20orf41; DKCA4; DKCB5; NHL; RTEL

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]

Product images:

