

Product datasheet for **KN214507**

RTEL1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	RTEL1
Locus ID:	51750
Components:	<p>KN214507G1, RTEL1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGGCATTGTAGGGCTGGAA</p> <p>KN214507G2, RTEL1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCCTGGAATGTCTGCAGC</p> <p>KN214507D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p> <p>Homologous arm and GFP-puro sequences: pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet</p> <pre> 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 CAGGTTGTCT CTCCAACCTT CTCCGCAGGA GGGACTGATG GAAACGCCTG GGAAAGTAGC CCGGTACCCA CAAAGGCTGT CTACAAACAG AGTCTTACTG TCTTTCCAG GTCTGTGCCA TAGGGATTCT CGAAGAGAAC AGCGTTGTGT CCCAGTGAC ATGCTCGCAT CGCTTACCAG GAGTGCCCGA GACCCTAAGA TGTTCCGAGT GGTTTTTTTCG CACAGACCCG AATAGCCTGC CCCTCAGCCA CGCTCTGTGC CTTTCTGAGA ACAGGCTGAT AGGTAGAGCA CAGGCCCGA GGAAAGGACT GCGGGTGGGT GGAGCTTCCG CCAGGACGGG GTGTGCTTCC CTCTCCCGGC CCATTCCAGC CAGGCCCTC CCGGCCAGAG GCAGCGTCTG TCATAAAAAG GGCTGGTGT CCAGGTGGGG TCAGAGAGAG GATTGACAAG TAAAAACGAT CGTCCTTTGA AGGGGGCCGG CCCCTCCACA CCTGTGGGTA TTTCTCATCA GCGGGGACGA GAGACTGAGA AAATGAATAA GACACAGAGA CAAAGTATAG AGAGAAAAGT GGGCCAGGG GACCGGCGCT CAGCATAAG AGGACCTGCA CCGGCACCAG TCTCTGAGTT TCCTCAGTAT TCATTAATTA CTATTTTAC TATCTCAGCA AGAGGAATGC GGCAGGACAG CAAGGTGATA GTGGGGAGAA GGTCAGCAAG AAAACGTGAG CAAAGGAATC TGGGTCACAA ATAAGTTCAA GGGAAGGTAC TATGCCTGGA TGTGCACGTA GGCTAGTTTT ATGCTTTTCT CCACCCAAAC ATCTCGGTGG </pre> <p>GE100003, scramble sequence in pCas-Guide vector</p>



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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:

