

Product datasheet for **KN407014**

Troponin C1 (TNNC1) Human Gene Knockout Kit (CRISPR)

Product data:

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| Product Type: | Knockout Kits (CRISPR) |
| Format: | 2 gRNA vectors, 1 linear donor |
| Donor DNA: | EF1a-GFP-P2A-Puro |
| Symbol: | Troponin C1 |
| Locus ID: | 7134 |
| Components: | <p>KN407014G1, Troponin C1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCCTTCGACATCTTCGTGCT</p> <p>KN407014G2, Troponin C1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGCACCGAACCATCATGACC</p> <p>KN407014D, Linear donor DNA containing LoxP-EF1A-tGFP-P2A-Puro-LoxP: The sequence below is cassette sequence only. The linear donor DNA also contains proprietary target sequence.</p> |

LoxP-EF1A-tGFP-P2A-Puro-LoxP (2739 bp)

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ATAACTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA
CATCGCCAC AGTCCCCGAG AAGTTGGGGG GAGGGTTCGG CAATTGAACC GGTGCCTAGA GAAGGTGGCG
CGGGGTAAC TGGGAAAGTG ATGTCGTGTA CTGGCTCCGC CTTTTCCCG AGGGTGGGGG AGAACCATAT
ATAAGTGAC TAGTCGCCGT GAACGTTCTT TTTCCGAACG GGTTCGCCGC CAGAACACAG GTAAGTGCCG
TGTGTGGTTC CCGCGGGCCT GGCCTCTTTA CGGGTTATGG CCCTTGCGTG CCTTGAATTA CTCCACCTG
GCTGCAGTAC GTGATTCTTG ATCCCGAGCT TCGGGTTGGA AGTGGGTGGG AGAGTTCGAG GCCTTGCCCT
TAAGGAGCCC CTCGCCTCG TGCTTGAGTT GAGGCCTGGC CTGGGGCTGG GGGCCGCGC GTGCGAATCT
GGTGGCACCT TCGCGCCTGT CTCGCTGCTT TCGATAAGTC TCTAGCCATT TAAAATTTTT GATGACCTGC
TGCGACGCTT TTTTTCTGGC AAGATAGTCT TGTAATGCG GGCCAAGATC TGCACACTGG TATTTTCGTT
TTTGGGGCG CGGGCGGCGA CGGGGCCCGT GCGTCCCAGC GCACATGTTC GGCGAGGCGG GGCCTGCGAG
CGCGGCCACC GAGAATCGGA CGGGGGTAGT CTCAAGCTGG CCGGCCTGCT CTGGTGCCTG GCCTCGCGCC
GCCGTGTATC GCCCCGCCCT GGGCGGCAAG GCTGGCCCGG TCGGCACCAG TTGCGTGAGC GGAAAGATGG
CCGCTTCCCG GCCCTGCTGC AGGGAGCTCA AAATGGAGGA CGCGGCCTC GGGAGAGCGG GCGGGTGAGT
CACCCACACA AAGGAAAAGG GCCTTCCGT CTCAGCCGT CGTTCATGT GACTCCACGG AGTACCGGGC
GCCGTCCAG CACCTCGATT AGTTCTCGAG CTTTTGAGT ACGTCTGCTT TAGGTTGGGG GGAGGGGTTT
TATGCGATGG AGTTTCCCA CACTGAGTGG GTGGAGACTG AAGTTAGGCC AGCTTGGCAC TTGATGTAAT
TCTCCTTGA ATTTGCCCTT TTTGAGTTG GATCTTGGT CATTCTCAAG CCTCAGACAG TGGTTCAAAG
TTTTTTCTT CCATTTCAAG TGTCGTGAAT GGAGAGCGAC GAGAGCGGCC TGCCCGCCAT GGAGATCGAG
TGCCGCATCA CCGGCACCCT GAACGGCGTG GAGTTCGAGC TGGTGGGCGG CGGAGAGGGC ACCCCGAGC
AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGGCGC CCTGACCTTC AGCCCCTACC TGCTGAGCCA
CGTGATGGG TACGGCTTCT ACCACTTCGG CACCTACCC AGCGGCTACG AGAACCCCTT CCTGCACGCC
ATCAACAACG GCGGCTACAC CAACACCCGC ATCGAGAAGT ACGAGGACGG CGGCGTGCT CACGTGAGCT
TCAGTACCG CTACGAGGCC GGCCCGGTGA TCGGCGACTT CAAGGTGATG GGCACCGGCT TCCCCGAGGA
CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT

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AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCGG CTACTIONACAGC TCCGTGGTGG
ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC GGGGGCCCCA TGTTGCCTT
CCGCCCGGTG GAGGAGGATC ACAGCAACAC CGAGCTGGGC ATCGTGGAGT ACCAGCACGC CTTCAAGACC
CCGGATGCAG ATGCCGGTGA AGAAAGAGGA AGCGGAGCTA CTACTIONCAG CCTGCTGAAG CAGGCTGGAG
ACGTGGAGGA GAACCTTGA CCTATGACCG AGTACAAGCC CACGGTGGC CTCGCCACC GCGACGACGT
CCCCAGGGCC GTACGCACCC TCGCCGCCG GTTCGCCGAC TACCCCGCCA CGGCCACAC CGTCGATCCG
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AGGTGTGGGT CGCGGACGAC GCGGCCGCGG TGGCGGTCTG GACCACGCCG GAGAGCGTCC AAGCGGGGGC
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCGCCG TGGCCGCGCA GCAACAGATG
GAAGGCCTCC TGGCGCCGCA CCGGCCAAG GAGCCCGCT GGTTCCTGGC CACCGTCGGC GTCTCGCCG
ACCACCAGGG CAAGGTCTG GGCAGCGCCG TCGTGTCCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT
GCCCGCTTC CTGGAGACT CCGCGCCCG CAACCTCCC TTCTACGAGC GGCTCGGCTT CACCGTCACC
GCCGACGTC AGGTGCCGA AGGACCGCG ACCTGGTGA TGACCCGAA GCCCGGTGCC TGAAACTTGT
TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTC ACAAATAAAG CATTTTTTTC
ACTGCATTCT AGTTGTGGT TGTCCAACT CATCAATGA TCTTAATAAC TTCGTATAAT GTATGTATA CGAAGTTAT

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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_003280](#)

UniProt ID:

[P63316](#)

Synonyms:

CMD1Z; CMH13; TN-C; TNC; TNNC

Summary:

Troponin is a central regulatory protein of striated muscle contraction, and together with tropomyosin, is located on the actin filament. Troponin consists of 3 subunits: TnI, which is the inhibitor of actomyosin ATPase; TnT, which contains the binding site for tropomyosin; and TnC, the protein encoded by this gene. The binding of calcium to TnC abolishes the inhibitory action of TnI, thus allowing the interaction of actin with myosin, the hydrolysis of ATP, and the generation of tension. Mutations in this gene are associated with cardiomyopathy dilated type 1Z. [provided by RefSeq, Oct 2008]

Product images:

