

Product datasheet for TL308717

OriGene Technologies, Inc.

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Troponin C1 (TNNC1) Human shRNA Plasmid Kit (Locus ID 7134)

Product data:

Product Type: shRNA Plasmids

Product Name: Troponin C1 (TNNC1) Human shRNA Plasmid Kit (Locus ID 7134)

Locus ID: 7134

Synonyms: CMD1Z; CMH13; TN-C; TNC; TNNC

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: TNNC1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 7134).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 003280, NM 003280.1, NM 003280.2, BC030244, BC030244.1, NM 003280.3

UniProt ID: P63316

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: Tnl, 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 Tnl, 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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





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Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).