

Product datasheet for **TR308715**

Troponin I fast skeletal muscle (TNNI2) Human shRNA Plasmid Kit (Locus ID 7136)

Product data:

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| Product Type: | shRNA Plasmids |
| Product Name: | Troponin I fast skeletal muscle (TNNI2) Human shRNA Plasmid Kit (Locus ID 7136) |
| Locus ID: | 7136 |
| Synonyms: | AMCD2B; DA2B; DA2B1; FSSV; fsTnI |
| Vector: | pRS (TR20003) |
| E. coli Selection: | Ampicillin |
| Mammalian Cell Selection: | Puromycin |
| Format: | Retroviral plasmids |
| Components: | TNNI2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 7136). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free. |
| RefSeq: | NM_001145829 , NM_001145841 , NM_003282 , NM_003282.1 , NM_003282.2 , NM_003282.3 , NM_001145829.1 , NM_001145841.1 , BC032148 , BC032148.2 , NM_001145841.2 |
| UniProt ID: | P48788 |
| Summary: | This gene encodes a fast-twitch skeletal muscle protein, a member of the troponin I gene family, and a component of the troponin complex including troponin T, troponin C and troponin I subunits. The troponin complex, along with tropomyosin, is responsible for the calcium-dependent regulation of striated muscle contraction. Mouse studies show that this component is also present in vascular smooth muscle and may play a role in regulation of smooth muscle function. In addition to muscle tissues, this protein is found in corneal epithelium, cartilage where it is an inhibitor of angiogenesis to inhibit tumor growth and metastasis, and mammary gland where it functions as a co-activator of estrogen receptor-related receptor alpha. This protein also suppresses tumor growth in human ovarian carcinoma. Mutations in this gene cause myopathy and distal arthrogyrosis type 2B. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Mar 2009] |
| 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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service . |



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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).