

Product datasheet for **TR308713**

Troponin T1 (TNNT1) Human shRNA Plasmid Kit (Locus ID 7138)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Troponin T1 (TNNT1) Human shRNA Plasmid Kit (Locus ID 7138)
Locus ID:	7138
Synonyms:	ANM; NEM5; STNT; TNT; TNTS
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	TNNT1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 7138). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001126132 , NM_001126133 , NM_001291774 , NM_003283 , NM_003283.1 , NM_003283.2 , NM_003283.3 , NM_003283.4 , NM_003283.5 , NM_001126133.1 , NM_001126133.2 , NM_001126132.1 , NM_001126132.2 , NM_001291774.1 , BC107798 , BC010963 , BC007074 , BC022086 , BC034143 , NM_001126133.3 , NM_001291774.2 , NM_003283.6 , NM_001126132.3
UniProt ID:	P13805
Summary:	This gene encodes a protein that is a subunit of troponin, which is a regulatory complex located on the thin filament of the sarcomere. This complex regulates striated muscle contraction in response to fluctuations in intracellular calcium concentration. This complex is composed of three subunits: troponin C, which binds calcium, troponin T, which binds tropomyosin, and troponin I, which is an inhibitory subunit. This protein is the slow skeletal troponin T subunit. Mutations in this gene cause nemaline myopathy type 5, also known as Amish nemaline myopathy, a neuromuscular disorder characterized by muscle weakness and rod-shaped, or nemaline, inclusions in skeletal muscle fibers which affects infants, resulting in death due to respiratory insufficiency, usually in the second year. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]



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- 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](#).
- 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).