

## Product datasheet for **CF804479**

### Troponin C1 (TNNC1) Mouse Monoclonal Antibody [Clone ID: OTI5H3]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI5H3
Applications:	IHC, WB
Recommended Dilution:	IHC 1:150
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human TNNC1 (NP_003271) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	18.2 kDa
Gene Name:	troponin C1, slow skeletal and cardiac type
Database Link:	<a href="#">NP_003271</a> <a href="#">Entrez Gene 21924 Mouse</a> <a href="#">Entrez Gene 290561 Rat</a> <a href="#">Entrez Gene 7134 Human</a> <a href="#">P63316</a>



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**Background:**

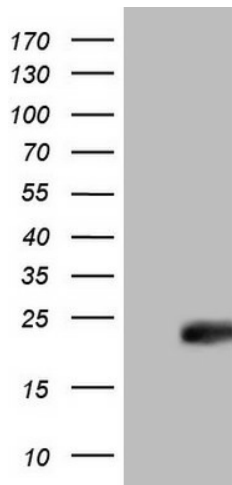
Troponin is a central regulatory protein of striated muscle contraction, and together with tropomyosin, is located on the actin filament. Troponin consists of 3 subunits: TnI, which is the inhibitor of actomyosin ATPase; TnT, which contains the binding site for tropomyosin; and TnC, the protein encoded 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]

**Synonyms:**

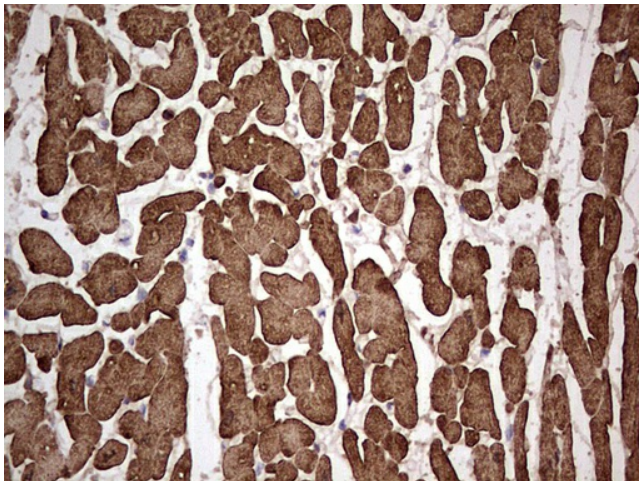
CMD1Z; CMH13; TN-C; TNC; TNNC

**Protein Pathways:**

Calcium signaling pathway, Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

**Product images:**


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TNNC1 (Cat# [RC207014], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TNNC1 (Cat# [TA804479]). Positive lysates [LY401131] (100ug) and [LC401131] (20ug) can be purchased separately from OriGene.



Immunohistochemical staining of paraffin-embedded Human adult heart tissue using anti-TNNC1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min, [TA804479])