

Product datasheet for **CF500256**

Cardiac Troponin I (TNNI3) Mouse Monoclonal Antibody [Clone ID: OTI4A3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4A3
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000 IHC 1:50
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant protein expressed in E.coli corresponding to amino acids 1-210 of human TNNI3
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:	32.7 kDa
Gene Name:	troponin I3, cardiac type
Database Link:	NP_000354 Entrez Gene 21954 Mouse Entrez Gene 29248 Rat Entrez Gene 7137 Human P19429



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Background:

Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains three genes: TnI-skeletal-fast-twitch, TnI-skeletal-slow-twitch, and TnI-cardiac. This gene encodes the TnI-cardiac protein and is exclusively expressed in cardiac muscle tissues. Mutations in this gene cause familial hypertrophic cardiomyopathy type 7 (CMH7) and familial restrictive cardiomyopathy (RCM).

Synonyms:

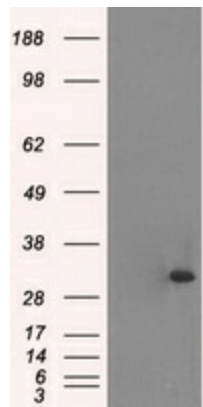
CMD1FF; CMD2A; CMH7; cTnI; RCM1; TNNC1

Protein Families:

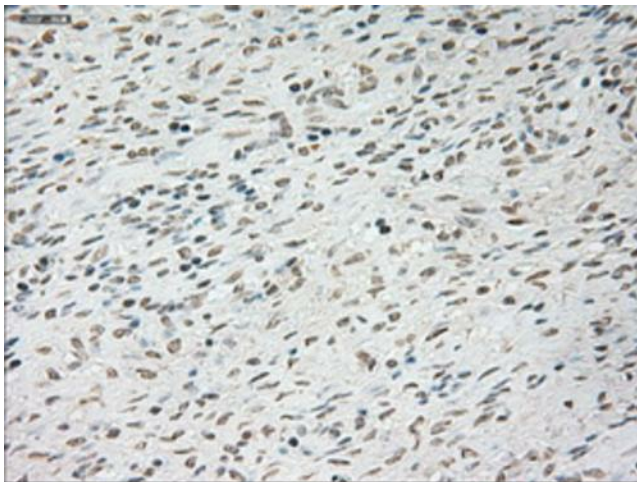
Druggable Genome, ES Cell Differentiation/IPS, Stem cell - Pluripotency

Protein Pathways:

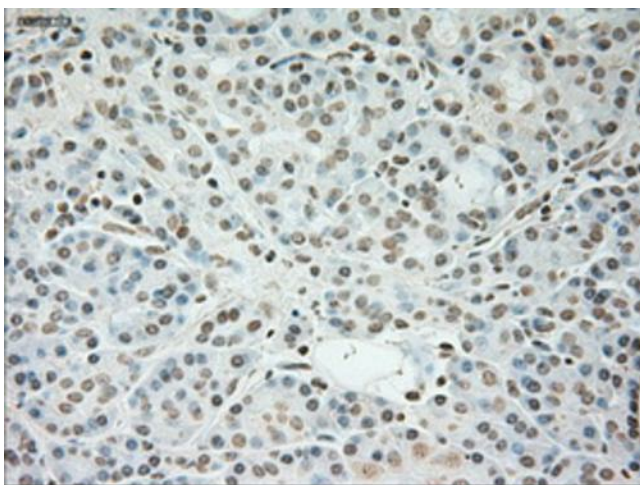
Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY TNNI3 [RC214740], 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-TNNI3. Positive lysates [LY424766] (100ug) and [LC424766] (20ug) can be purchased separately from OriGene.



Immunohistochemical staining of paraffin-embedded Ovary tissue within the normal limits using anti-TNNI3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded pancreas tissue within the normal limits using anti-TNNI3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.