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TNNI3 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant TNNI3.
Catalog # AT4292a

Product Information

Application	WB, IHC, IF, E
Primary Accession	P19429
Other Accession	NM_000363
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1E8
Calculated MW	24008

Additional Information

Gene ID	7137
Other Names	Troponin I, cardiac muscle, Cardiac troponin I, TNNI3, TNNC1
Target/Specificity	TNNI3 (NP_000354, 102 a.a. ~ 210 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	TNNI3 Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

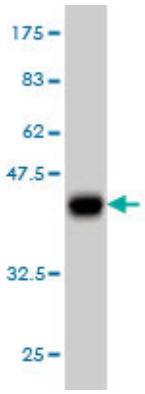
Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains 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).

References

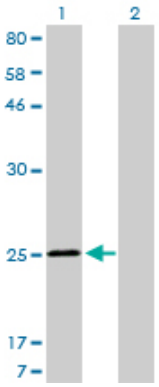
1.Myomegalin is a novel A-kinase anchoring protein involved in the phosphorylation of cardiac myosin

binding protein C.Uys GM, Ramburan A, Loos B, Kinnear CJ, Korkie LJ, Mouton J, Riedemann J, Moolman-Smook JC.BMC Cell Biol. 2011 May 10;12:18.

Images

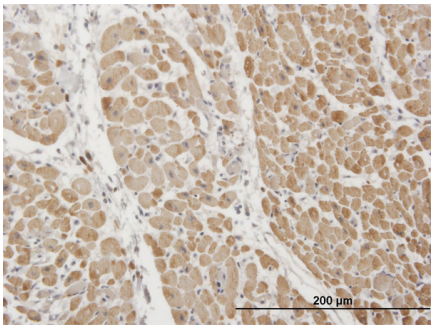


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.73 KDa) .

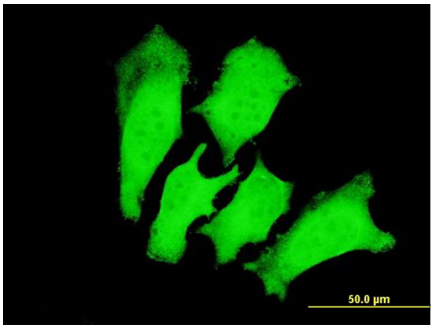


Western Blot analysis of TNNI3 expression in transfected 293T cell line by TNNI3 monoclonal antibody (M04), clone 1E7.

Lane 1: TNNI3 transfected lysate(24 KDa).
Lane 2: Non-transfected lysate.

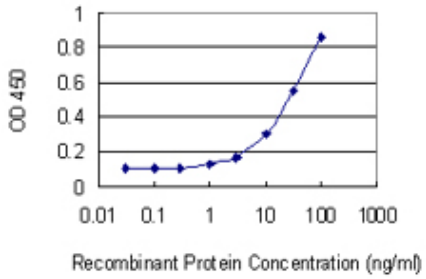


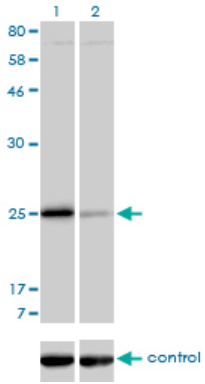
Immunoperoxidase of monoclonal antibody to TNNI3 on formalin-fixed paraffin-embedded human heart. [antibody concentration 0.7 ug/ml]



Immunofluorescence of monoclonal antibody to TNNI3 on HeLa cell . [antibody concentration 10 ug/ml]

Detection limit for recombinant GST tagged TNNI3 is 1 ng/ml as a capture antibody.





Western blot analysis of TNNI3 over-expressed 293 cell line, cotransfected with TNNI3 Validated Chimera RNAi ((Cat # AT4292a)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.