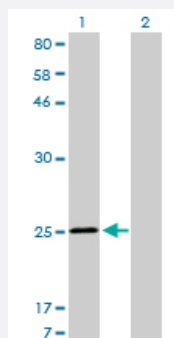


TNNI3 monoclonal antibody (M04), clone 1E7

Catalog # H00007137-M04

Size 100 ug

Applications

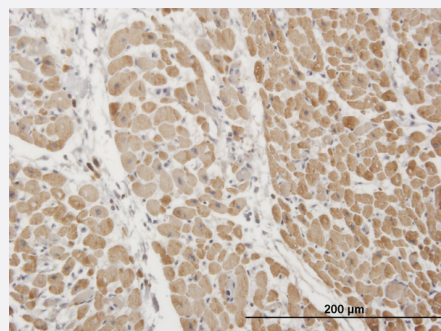


Western Blot (Transfected lysate)

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

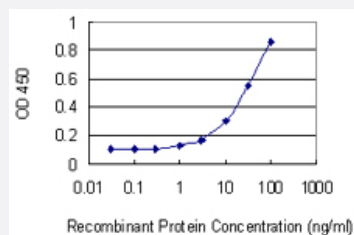
Lane 1: TNNI3 transfected lysate (24 kDa).

Lane 2: Non-transfected lysate.



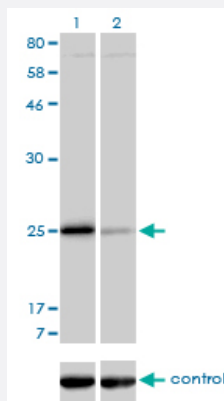
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



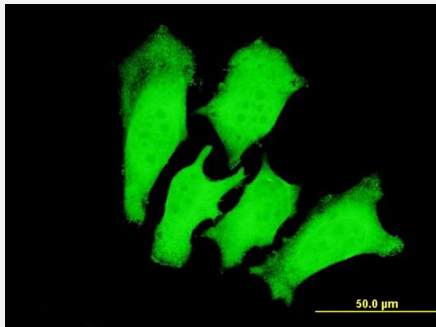
Sandwich ELISA (Recombinant protein)

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



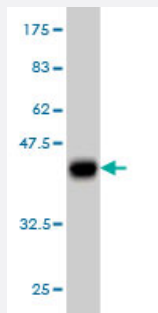
RNAi Knockdown (Antibody validated)

Western blot analysis of TNNI3 over-expressed 293 cell line, cotransfected with TNNI3 Validated Chimera RNAi (Cat # H00007137-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with TNNI3 monoclonal antibody (M04), clone 1E7 (Cat # H00007137-M04). GAPDH (36.1 kDa) used as specificity and loading control.



Immunofluorescence

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



Western Blot detection against Immunogen (37.73 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant TNNI3.
Immunogen	TNNI3 (NP_000354, 102 a.a. ~ 210 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	ARVDKVDEERYDIEAKVTKNITEIADLTQKIFDLRGKFKRPTLRRVRISADAMMQALLGARAKESLD LRAHLKQVKKEDTEKENREVGDWKRNIDALSGMEGRKKKFES
Host	Mouse
Reactivity	Human
Isotype	IgG2a Kappa

Quality Control Testing

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

Storage Buffer

In 1x PBS, pH 7.4

Storage Instruction

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

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.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

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

[Protocol Download](#)

- ELISA

- RNAi Knockdown (Antibody validated)

Western blot analysis of TNNI3 over-expressed 293 cell line, cotransfected with TNNI3 Validated Chimera RNAi (Cat # H00007137-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with TNNI3 monoclonal antibody (M04), clone 1E7 (Cat # H00007137-M04). GAPDH (36.1 kDa) used as specificity and loading control.

[Protocol Download](#)

- Immunofluorescence

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

Gene Info — TNNI3

Entrez GeneID [7137](#)

GeneBank Accession# [NM_000363](#)

Protein Accession# [NP_000354](#)

Gene Name TNNI3

Gene Alias CMD2A, CMH7, MGC116817, RCM1, TNNC1, cTnI

Gene Description troponin I type 3 (cardiac)

Omim ID [115210](#) [191044](#)

Gene Ontology [Hyperlink](#)

Gene Summary 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). [provided by RefSeq]

Other Designations familial hypertrophic cardiomyopathy 7|troponin I, cardiac

Publication Reference

- [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 Biology 2011 May; 12:18.

Application: IF, IP, IP-WB, WB-Tr, Rat, H9C2 cardiomyocytes

Pathway

- [Cardiac muscle contraction](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)

Disease

- [Alzheimer disease](#)
- [Cardiomegaly](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Death](#)
- [Diabetes Complications](#)
- [Genetic Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Hypertrophy](#)
- [Lipid Metabolism](#)
- [Metabolic Syndrome X](#)
- [Mitochondrial Myopathies](#)
- [Neoplasms](#)
- [Osteoporosis](#)
- [Tachycardia](#)