

# 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

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**

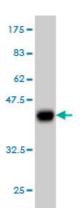
Troponin I (TnI), along with troponin T (TnT) and troponin C (TnC), is one of 3 subunits that form the troponin complex of the thin filaments of striated muscle. TnI is the inhibitory subunit; blocking actin-myosin interactions and thereby mediating striated muscle relaxation. The TnI subfamily contains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

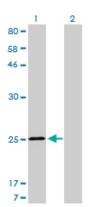
1. Myomegalin is a novel A-kinase anchoring protein involved in the phosphorylation of cardiac myosin

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**

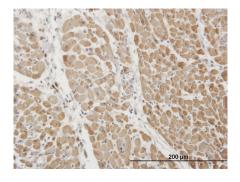


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.73 KDa) .

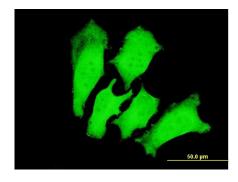


Western Blot analysis of TNNI3 expression in transfected 293T cell line by TNNI3 monoclonal antibody (M04), clone 1E7.

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

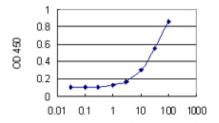


Immunoperoxidase of monoclonal antibody to TNNI3 on formalin-fixed paraffin-embedded human heart. [antibody concentration 0.7 ug/ml]

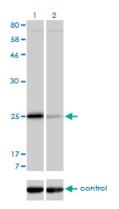


Immunofluorescence of monoclonal antibody to TNNI3 on HeLa cell . [antibody concentration 10 ug/ml]

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



Recombinant Protein Concentration (ng/ml)



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'.