

TNNI2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1626a**Specification****TNNI2 Antibody - Product Information**

Application	WB, IHC, FC, E
Primary Accession	P48788
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	21kDa KDa

Description

This gene encodes a fast-twitch skeletal muscle protein, a member of the troponin I gene family, and a component of the troponin complex including troponin T, troponin C and troponin I subunits. The troponin complex, along with tropomyosin, is responsible for the calcium-dependent regulation of striated muscle contraction. Mouse studies show that this component is also present in vascular smooth muscle and may play a role in regulation of smooth muscle function. In addition to muscle tissues, this protein is found in corneal epithelium, cartilage where it is an inhibitor of angiogenesis to inhibit tumor growth and metastasis, and mammary gland where it functions as a co-activator of estrogen receptor-related receptor alpha. This protein also suppresses tumor growth in human ovarian carcinoma. Mutations in this gene cause myopathy and distal arthrogryposis type 2B. Alternatively spliced transcript variants have been found for this gene.

Immunogen

Purified recombinant fragment of human TNNI2 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

TNNI2 Antibody - Additional Information

Gene ID 7136

Other Names

Troponin I, fast skeletal muscle, Troponin I, fast-twitch isoform, TNNI2

Dilution

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

FC~~1/200 - 1/400

E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TNNI2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TNNI2 Antibody - Protein Information

Name TNNI2

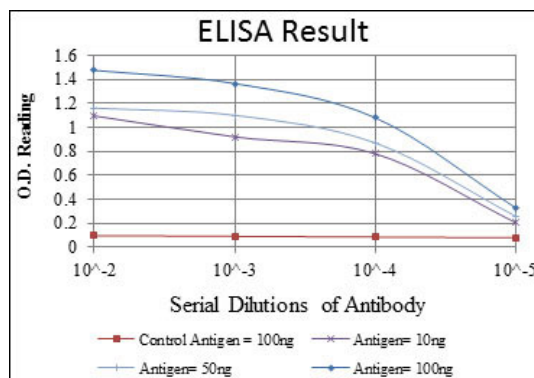
Function

Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.

TNNI2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



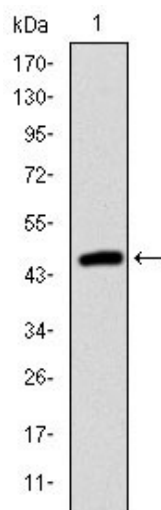


Figure 1: Western blot analysis using TNNI2 mAb against human TNNI2 (AA: 1-182) recombinant protein. (Expected MW is 46.8 kDa)

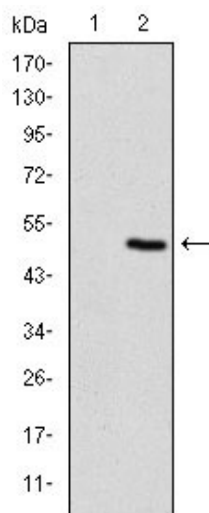


Figure 2: Western blot analysis using TNNI2 mAb against HEK293 (1) and TNNI2(AA: 1-182)-hIgGFc transfected HEK293 (2) cell lysate.

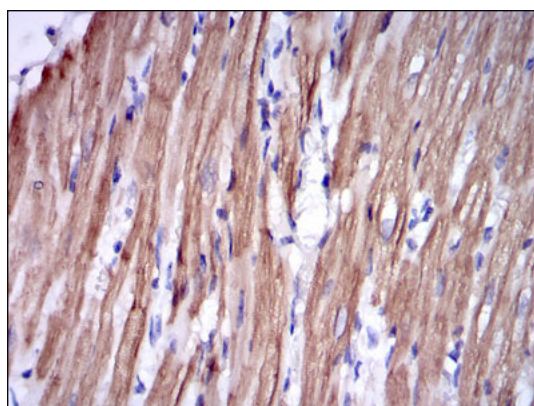


Figure 3: Immunohistochemical analysis of paraffin-embedded rabbit cardiac muscle tissues using TNNI2 mouse mAb with DAB staining.

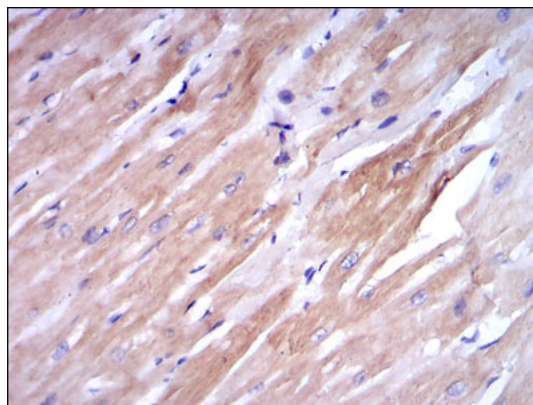


Figure 4: Immunohistochemical analysis of paraffin-embedded cardiac muscle tissues using TNNI2 mouse mAb with DAB staining.

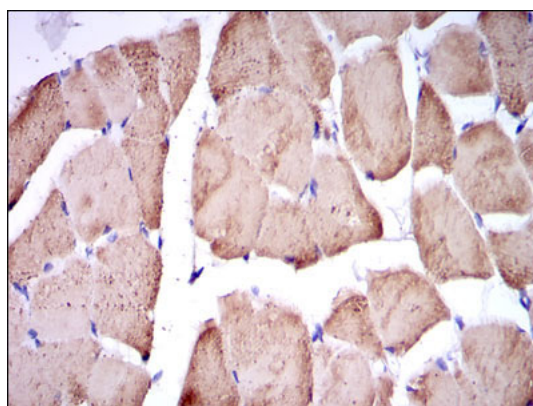


Figure 5: Immunohistochemical analysis of paraffin-embedded striated muscle tissues using TNNI2 mouse mAb with DAB staining.

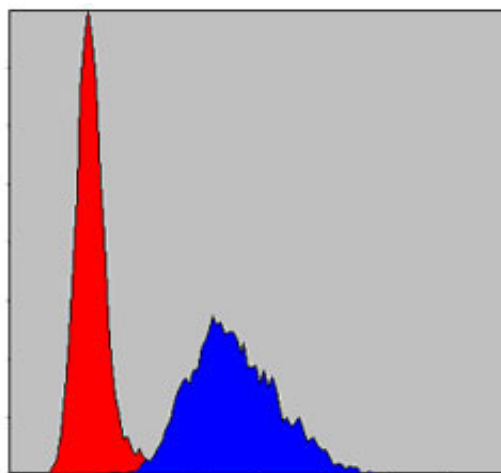


Figure 6: Flow cytometric analysis of NIH/3T3 cells using TNNI2 mouse mAb (blue) and negative control (red).

TNNI2 Antibody - References

1. Am J Hum Genet. 2009 Nov;85(5):628-42.
2. Cell Motil Cytoskeleton. 2008 Aug;65(8):652-61.