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TNNI2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1650a

Product Information

Application	WB, FC, ICC, E
Primary Accession	P48788
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2F12G2
Isotype	IgG1
Calculated MW	21339
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	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	7136
Other Names	Troponin I, fast skeletal muscle, Troponin I, fast-twitch isoform, TNNI2
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A 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.

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.

References

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

Images

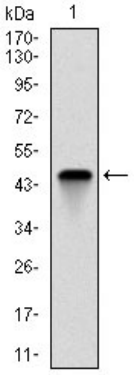


Figure 1: Western blot analysis using TNNI2 mAb against human TNNI2 (AA: 1-182) recombinant protein. (Expected MW is 21 kDa)

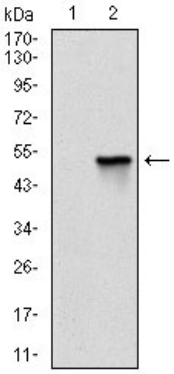


Figure 2: Western blot analysis using TNNI2 mAb against HEK293 (1) and TNNI2 (AA: 1-182)-hIgGFc transfected HEK293 (2) cell lysate.

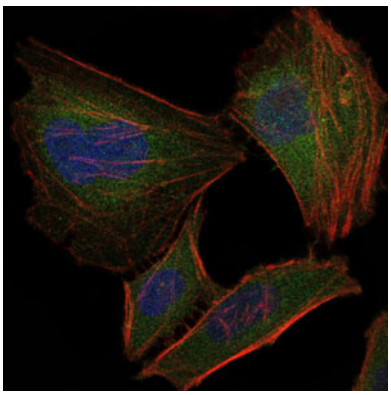
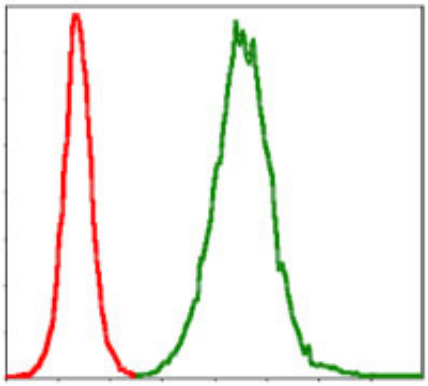


Figure 3: Immunofluorescence analysis of Hela cells using TNNI2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

Figure 4: Flow cytometric analysis of NIH/3T3 cells using TNNI2 mouse mAb (green) and negative control (red).



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