Best Tools for immunology Research

Troponin I-FS Monoclonal Antibody

Catalog No :	YM0632
Reactivity :	Human
Applications :	WB;IHC;IF;FCM;ELISA
Target :	Troponin I-FS
Gene Name :	TNNI2
Protein Name :	Troponin I fast skeletal muscle
Human Gene Id :	7136
Human Swiss Prot No :	P48788
Mouse Swiss Prot No :	P13412
Immunogen :	Purified recombinant fragment of human Troponin I-FS expressed in E. Coli.
Specificity :	Troponin I-FS Monoclonal Antibody detects endogenous levels of Troponin I-FS protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IHC 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000.. IF 1:50-200
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	21kD
P References :	1. Am J Hum Genet. 2009 Nov;85(5):628-42. 2. Cell Motil Cytoskeleton. 2008 Aug;65(8):652-61.

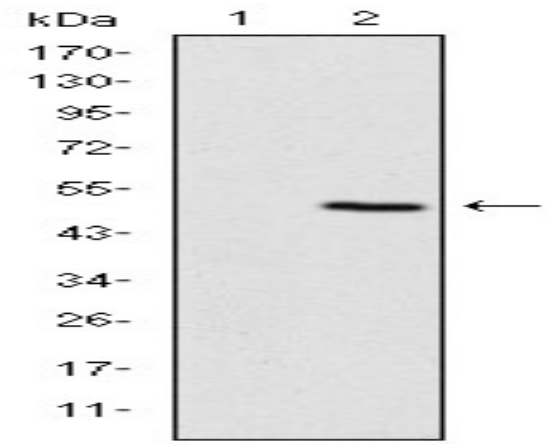
Background : This gene encodes a fast-twitch skeletal muscle protein, a member of the troponin I gene family, and a component of the troponin complex including troponin T, troponin C and troponin I subunits. The troponin complex, along with tropomyosin, is responsible for the calcium-dependent regulation 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 trans

Function : caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,disease:Defects in TNNI2 are a cause of distal arthrogryposis type 2B (DA2B) [MIM:601680]; also known as arthrogryposis multiplex congenita, distal, type 2B (AMCD2B). DA2B is a form of inherited multiple congenital contractures. Affected individuals have vertical talus, ulnar deviation in the hands, severe camptodactyly, and a distinctive face characterized by a triangular shape, prominent nasolabial folds, small mouth and a prominent chin.,function:Troponin I is the inhibitory subunit of troponin, the thin filament regulatory complex which confers calcium-sensitivity to striated muscle actomyosin ATPase activity.,similarity:Belongs to the troponin I family.,subunit:Binds to actin and tropomyosin.,

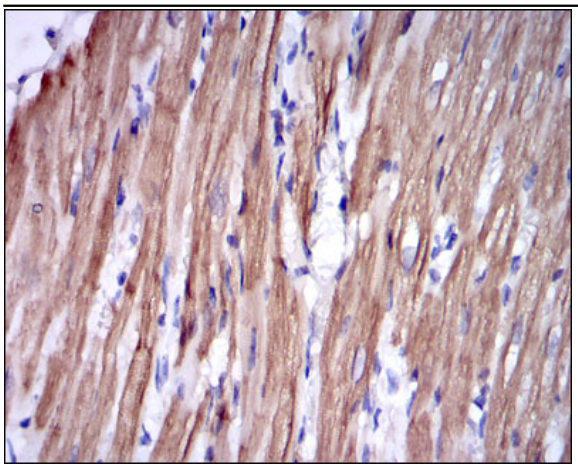
Subcellular Location : nucleus,cytosol,troponin complex,

Expression : Muscle,Skeletal muscle,

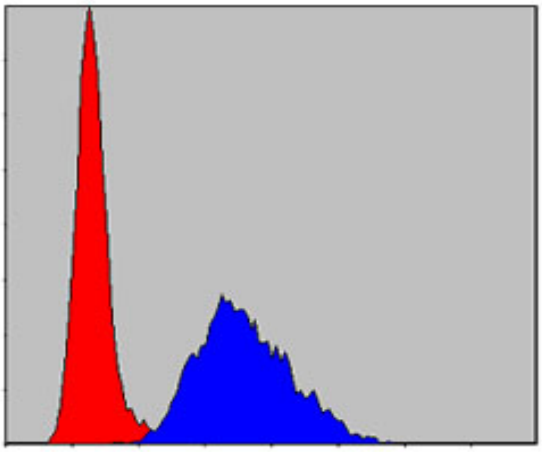
Products Images



Western Blot analysis using Troponin I-FS Monoclonal Antibody against HEK293 (1) and TNNI2-hIgGFc transfected HEK293 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded rabbit cardiac muscle tissues with DAB staining using Troponin I-FS Monoclonal Antibody.



Flow cytometric analysis of NIH/3T3 cells using Troponin I-FS Monoclonal Antibody (blue) and negative control (red).