Datasheet for ABIN968822

anti-TCAP antibody (AA 1-167)

1 Image | 4 Publications

Go to Product page

Overview

Quantity:	50 µg
Target:	TCAP
Binding Specificity:	AA 1-167
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TCAP antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	Mouse Telethonin aa. 1-167
Clone:	53-Telethonin
Isotype:	IgG1
Cross-Reactivity:	Human, Rat (Rattus)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	TCAP
Alternative Name:	Telethonin (TCAP Products)
Background:	Autosomal recessive limb-girdle muscular dystrophy (AR LGMD), a genetically heterogeneous group of disorders affecting the proximal musculature, has eight distinct forms: 2A to 2H. Each of these forms is caused by specific gene mutations. A mutation in the telethonin gene causes LGMD 2G. Telethonin, a 19 kDa sarcomeric protein found in striated and cardiac muscle, has a developmentally and functionally regulated expression pattern. Telethonin transcript down-regulation occurs in response to muscle denervation. Protein levels of telethonin are partially regulated by neuronal activity, thereby linking telethonin to dynamic control of myofibrillogenesis and muscle turnover in human skeletal muscle. The telethonin transcript exhibits a pattern of accumulation typical of contractile proteins, suggesting a role for the protein in myofibrillar assembly. Immunofluorescence images show that telethonin co-localizes with myosin, which is an expression pattern typical of sarcomeric proteins. Telethonin has a known sarcomeric binding partner, titin, and is also known as titin CAP (TCAP). Therefore, telethonin plays a major role in AR LGMD 2G and is also important as a developmentally and functionally regulated sarcomeric protein.
Molecular Weight:	19 kDa

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

Storage Comment:	Store undiluted at -20°C.

Publications

Product cited in:

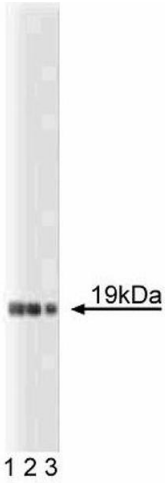
Schröder, Reimann, Iakovenko, Mues, Bönnemann, Matten, Gautel: "Early and selective disappearance of telethonin protein from the sarcomere in neurogenic atrophy." in: **Journal of muscle research and cell motility**, Vol. 22, Issue 3, pp. 259-64, (2001) (PubMed).

Moreira, Wiltshire, Faulkner, Nilforoushan, Vainzof, Suzuki, Valle, Reeves, Zatz, Passos-Bueno, Jenne: "Limb-girdle muscular dystrophy type 2G is caused by mutations in the gene encoding the sarcomeric protein telethonin." in: **Nature genetics**, Vol. 24, Issue 2, pp. 163-6, (2000) (PubMed).

Mason, Bayol, Loughna: "The novel sarcomeric protein telethonin exhibits developmental and functional regulation." in: **Biochemical and biophysical research communications**, Vol. 257, Issue 3, pp. 699-703, (1999) (PubMed).

Valle, Faulkner, De Antoni, Pacchioni, Pallavicini, Pandolfo, Tiso, Toppo, Trevisan, Lanfranchi: " Telethonin, a novel sarcomeric protein of heart and skeletal muscle." in: **FEBS letters**, Vol. 415, Issue 2, pp. 163-8, (1997) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of Telethonin of mouse heart lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of Telethonin.