

Tropomyosin α Polyclonal Antibody

Catalog No: YT6089

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA

Target: Tropomyosin a

Fields: >> Cardiac muscle contraction;>> Adrenergic signaling in

cardiomyocytes;>>MicroRNAs in cancer;>>Hypertrophic

cardiomyopathy;>>Dilated cardiomyopathy

Gene Name: TPM1

Protein Name: Tropomyosin α

Human Gene Id: 7168

Human Swiss Prot

No:

Mouse Gene ld: 22003

Mouse Swiss Prot

No:

Immunogen : Synthesized peptide derived from human Tropomyosin α. at AA range: 101-150

Specificity: Tropomyosin a Polyclonal Antibody detects endogenous levels of Tropomyosin

α

P09493

P58771

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500-2000, ELISA 1:10000-20000

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

1/3



Concentration: 1 mg/ml

-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:**

Observed Band: 38kD

Cardiac muscle contraction; Hypertrophic cardiomyopathy (HCM); Dilated **Cell Pathway:**

cardiomyopathy;

Background: This gene is a member of the tropomyosin family of highly conserved, widely

> distributed actin-binding proteins involved in the contractile system of striated and smooth muscles and the cytoskeleton of non-muscle cells. Tropomyosin is composed of two alpha-helical chains arranged as a coiled-coil. It is polymerized end to end along the two grooves of actin filaments and provides stability to the filaments. The encoded protein is one type of alpha helical chain that forms the predominant tropomyosin of striated muscle, where it also functions in association with the troponin complex to regulate the calcium-dependent interaction of actin and myosin during muscle contraction. In smooth muscle and non-muscle cells, alternatively spliced transcript variants encoding a range of isoforms have been

cardiomyopathy. [provided by

Function: alternative products: Additional isoforms seem to exist, disease: Defects in TPM1

> are the cause of cardiomyopathy dilated type 1Y (CMD1Y) [MIM:611878]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are

described. Mutations in this gene are associated with type 3 familial hypertrophic

at risk of premature death., disease: Defects in TPM1 are the cause of

cardiomyopathy familial hypertrophic type 3 (CMH3) [MIM:115196]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant

forms with high risk of cardiac failure and sudde

Subcellular Location:

Cytoplasm, cytoskeleton. Associates with F-actin stress fibers. .

Expression:

Detected in primary breast cancer tissues but undetectable in normal breast tissues in Sudanese patients. Isoform 1 is expressed in adult and fetal skeletal muscle and cardiac tissues, with higher expression levels in the cardiac tissues.

Isoform 10 is expressed in adult and fetal cardiac tissues, but not in skeletal

muscle.

23587 Sort:

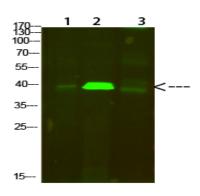
No4:



Host: Rabbit

Modifications: Unmodified

Products Images



Western Blot analysis of 1,mouse-lung 2,mouse-brain 3,mouse-spleen cells using primary antibody diluted at 1:500(4°C overnight). Secondary antibody:Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour)