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Rabbit Anti-Tropomyosin antibody

SL9622R

Product Name:	Tropomyosin
Chinese Name:	原肌球蛋白1抗体
Alias:	Tropomyosin 1 (alpha); Alpha tropomyosin; Alpha-tropomyosin; C15orf13; cardiomyopathy, hypertrophic 3; CMD1Y; CMH3; HTM alpha; sarcomeric tropomyosin kappa; TMSA; TPM1; TPM1_HUMAN; Tropomyosin 1; Tropomyosin1; Tropomyosin alpha 1 chain; Tropomyosin alpha-1 chain; Tropomyosin-1; Tropomyosin α; Tropomyosin-α; Tropomyosinα.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Zebrafish,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	33kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Tropomyosin:201-284/284
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Binds to actin filaments in muscle and non-muscle cells. Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction. Smooth muscle contraction is regulated by interaction with

caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments.

Function:
Binds to actin filaments in muscle and non-muscle cells. Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction. Smooth muscle contraction is regulated by interaction with caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments.

Subunit:
Heterodimer of an alpha and a beta chain (By similarity). Interacts with HRG (via the HRR domain); the interaction contributes to the antiangiogenic properties of the histidine/proline-rich region (HRR) of HRG.

Subcellular Location:
Cytoplasm, cytoskeleton.

Tissue Specificity:
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.

Post-translational modifications:
Phosphorylated at Ser-283 by DAPK1 in response to oxidative stress and this phosphorylation enhances stress fiber formation in endothelial cells.

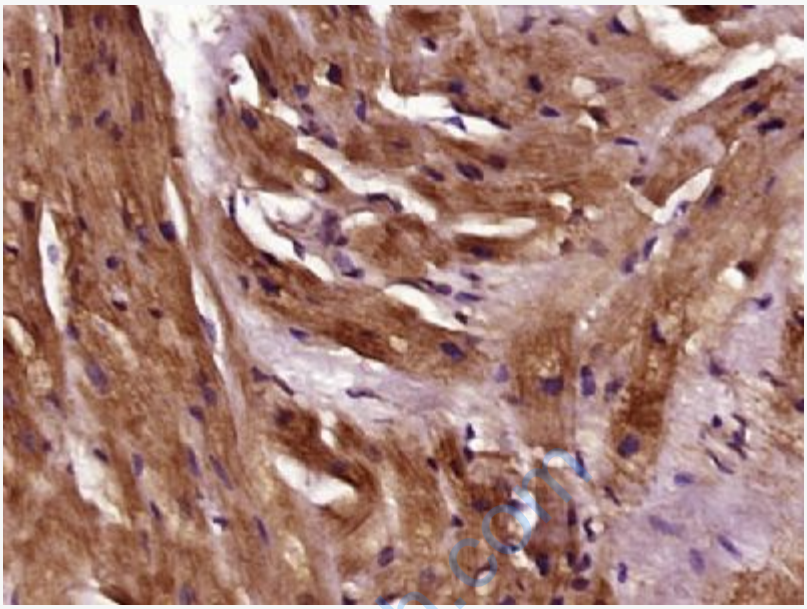
DISEASE:
Defects in TPM1 are the cause of familial hypertrophic cardiomyopathy type 3 (CMH3) [MIM:115196]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms 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 sudden cardiac death.
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 at risk of premature death.

Similarity:
Belongs to the tropomyosin family.

SWISS:
P09493

Gene ID:

	7168 **Database links:** Entrez Gene: 7168Human Entrez Gene: 22003Mouse Entrez Gene: 100037999Pig Entrez Gene: 24851Rat Entrez Gene: 30324Zebrafish Omim: 191010Human SwissProt: Q5KR49Cow SwissProt: P09493Human SwissProt: P58771Mouse SwissProt: P42639Pig SwissProt: P04692Rat SwissProt: P13104Zebrafish Unigene: 133892Human Unigene: 121878Mouse Unigene: 87540Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:	 Paraformaldehyde-fixed, paraffin embedded (human myocardial); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Tropomyosin) Polyclonal Antibody, Unconjugated (SL9622R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.