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TPM4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12756a

Product Information

Application	WB, FC, IHC-P, E
Primary Accession	P67936
Other Accession	P67937, NP_003281.1
Reactivity	Human
Predicted	Pig, Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32711
Calculated MW	28522
Antigen Region	26-54

Additional Information

Gene ID	7171
Other Names	Tropomyosin alpha-4 chain, TM30p1, Tropomyosin-4, TPM4
Target/Specificity	This TPM4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 26-54 amino acids from the N-terminal region of human TPM4.
Dilution	WB~~1:1000 FC~~1:10~50 IHC-P~~1:100 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TPM4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TPM4
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 (By similarity). Binds calcium (PubMed:1836432). Plays a role in platelet biogenesis.
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P09495}. Note=Associates with F-actin stress fibers. {ECO:0000250|UniProtKB:P09495}
Tissue Location	Detected in cardiac tissue and platelets, the form found in cardiac tissue is a higher molecular weight than the form found in platelets. Expressed at higher levels in the platelets of hypertensive patients with cardiac hypertrophy than in the platelets of hypertensive patients without cardiac hypertrophy (at protein level)

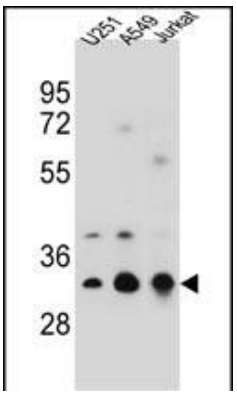
Background

This gene encodes a member of the tropomyosin family of actin-binding proteins involved in the contractile system of striated and smooth muscles and the cytoskeleton of non-muscle cells. Tropomyosins are dimers of coiled-coil proteins that polymerize end-to-end along the major groove in most actin filaments. They provide stability to the filaments and regulate access of other actin-binding proteins. In muscle cells, they regulate muscle contraction by controlling the binding of myosin heads to the actin filament. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

References

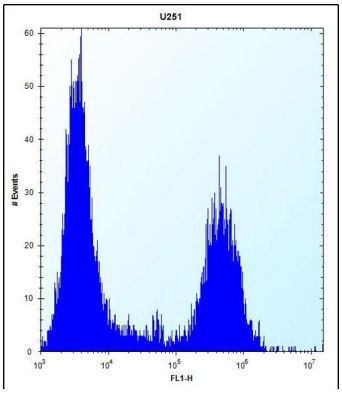
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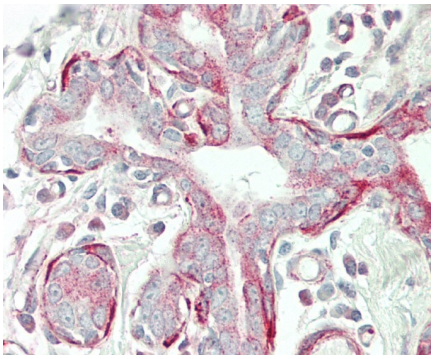
Images



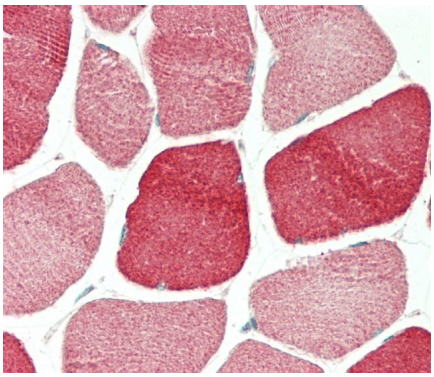
TPM4 Antibody (N-term) (Cat. #AP12756a) western blot analysis in U251,A549,Jurkat cell line lysates (35ug/lane).This demonstrates the TPM4 antibody detected the TPM4 protein (arrow).

TPM4 Antibody (N-term) (Cat. #AP12756a) flow cytometric analysis of U251 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.





Formalin-fixed and paraffin-embedded H.breast tissue reacted with TPM4 Antibody (N-term) (Cat#AP12756a).



Formalin-fixed and paraffin-embedded H.skeletal muscle tissue reacted with TPM4 Antibody (N-term) (Cat#AP12756a).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.