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TPM4 Rabbit pAb

Catalog # AP99082

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P67936
Other Accession	P67936
Predicted	Rat, Pig, Human, Mouse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28522
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TPM4
Epitope Specificity	151-248/248
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the tropomyosin family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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, Nov 2009]

Additional Information

Gene ID	7171
Other Names	BDPLT25; HEL-S-108; TPM4_HUMAN; TPM4; TM30p1; Tropomyosin-4; tropomyosin 4
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

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)

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