

TPM4 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12756a

Specification

TPM4 Antibody (N-term) - Product Information

Application	FC, WB, IHC-P,E
Primary Accession	P67936
Other Accession	P67937 , NP_003281.1 , P02561
Reactivity	Human
Predicted	Horse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	26-54

TPM4 Antibody (N-term) - 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

FC~~1:10~50

WB~~1:1000

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.

TPM4 Antibody (N-term) - 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

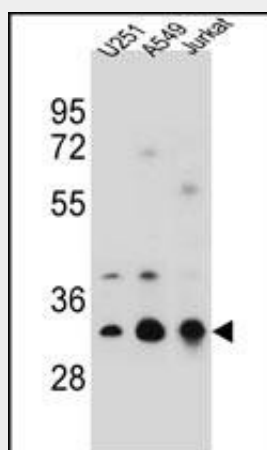
Detected in cardiac tissue and platelets, the form found in cardiac tissue is a higher molecular weight than the form found in platelets. Expressed at higher levels in the platelets of hypertensive patients with cardiac hypertrophy than in the platelets of hypertensive patients without cardiac hypertrophy (at protein level)

TPM4 Antibody (N-term) - Protocols

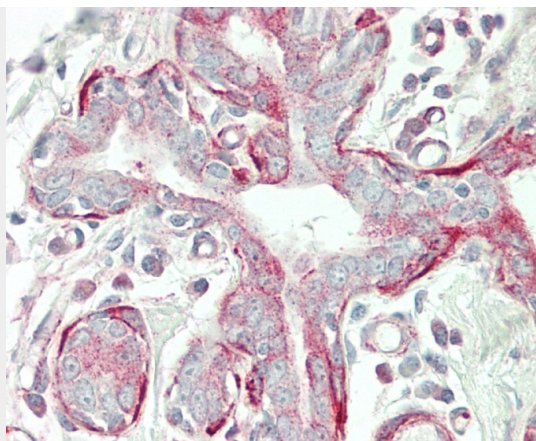
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

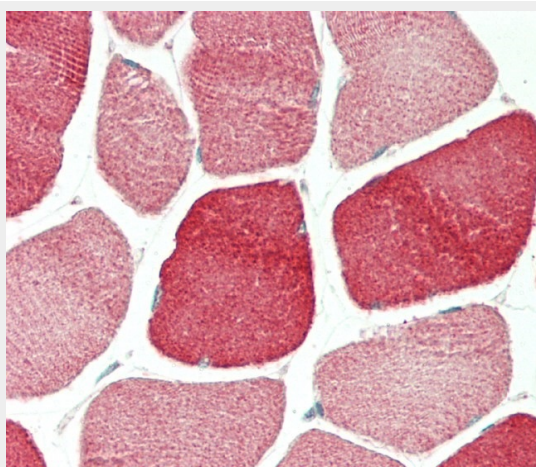
TPM4 Antibody (N-term) - Images



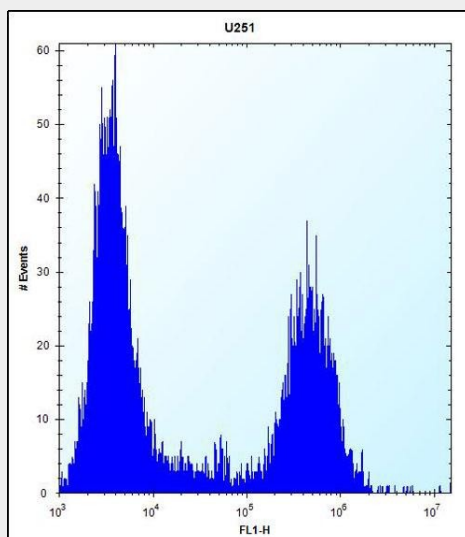
TPM4 Antibody (N-term) (Cat. #AP12756a) western blot analysis in U251,A549,Jurkat cell line lysates (35ug/lane).This demonstrates the TPM4 antibody detected the TPM4 protein (arrow).



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).



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.

TPM4 Antibody (N-term) - 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].

TPM4 Antibody (N-term) - References

Martins-de-Souza, D., et al. J Psychiatr Res 44(14):989-991(2010)
Vlahovich, N., et al. Cell Motil. Cytoskeleton 65(1):73-85(2008)
Montesano Gesualdi, N., et al. Free Radic. Res. 40(5):467-476(2006)
Hossain, M.M., et al. J. Biol. Chem. 280(51):42442-42453(2005)
Bruneel, A., et al. Proteomics 5(15):3876-3884(2005)