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TPM4 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP12756a

Specification

TPM4 Antibody (N-term) Blocking peptide - Product Information

Primary Accession P67936

TPM4 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 7171

Other Names
Tropomyosin alpha-4 chain, TM30p1, Tropomyosin-4, TPM4

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TPM4 Antibody (N-term) Blocking peptide - 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).

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)

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TPM4 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

TPM4 Antibody (N-term) Blocking peptide - Images

TPM4 Antibody (N-term) Blocking peptide - Background

This gene encodes a member of the tropomyosin family ofactin-binding proteins involved in the contractile system ofstriated and smooth muscles and the cytoskeleton of non-musclecells. Tropomyosins are dimers of coiled-coil proteins thatpolymerize end-to-end along the major groove in most actinfilaments. They provide stability to the filaments and regulateaccess of other actin-binding proteins. In muscle cells, theyregulate muscle contraction by controlling the binding of myosinheads to the actin filament. Multiple transcript variants encodingdifferent isoforms have been found for this gene. [provided byRefSeq].

TPM4 Antibody (N-term) Blocking peptide - 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)