

Anti-Tropomyosin(36kD) Antibody (Monoclonal, TM228)
Catalog # ABO10480**Specification**

Anti-Tropomyosin(36kD) Antibody (Monoclonal, TM228) - Product Information

Application	WB
Primary Accession	P09495
Host	Mouse
Isotype	Mouse IgG2a
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized

Description

Mouse IgG monoclonal antibody for Tropomyosin (36kD) detection. Tested with WB, IHC-F in Human;rabbit;chicken. No cross reactivity with other proteins.

Reconstitution

Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Anti-Tropomyosin(36kD) Antibody (Monoclonal, TM228) - Additional Information

Gene ID 24852

Other Names

Tropomyosin alpha-4 chain, Tropomyosin-4, TM-4, Tpm4

Calculated MW

28510 MW KDa

Application Details

Immunohistochemistry(Frozen Section), 1-2 µg/ml, Human, chicken, rabbit, -
Western blot, 0.5-1 µg/ml, Human, chicken, rabbit

Subcellular Localization

Cytoplasm, cytoskeleton.

Tissue Specificity

TPM1: 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.

Protein Name

Tropomyosin alpha-1 chain

Contents

Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN₃ as preservative.

Immunogen

Chicken gizzard tropomyosin.

Purification

Ascites

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-Tropomyosin(36kD) Antibody (Monoclonal, TM228) - Protein Information**Name** Tpm4**Function**

Binds to actin filaments in muscle and non-muscle cells (PubMed:7568216). Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction (By similarity). Smooth muscle contraction is regulated by interaction with caldesmon (By similarity). In non- muscle cells is implicated in stabilizing cytoskeleton actin filaments (By similarity). Binds calcium (By similarity).

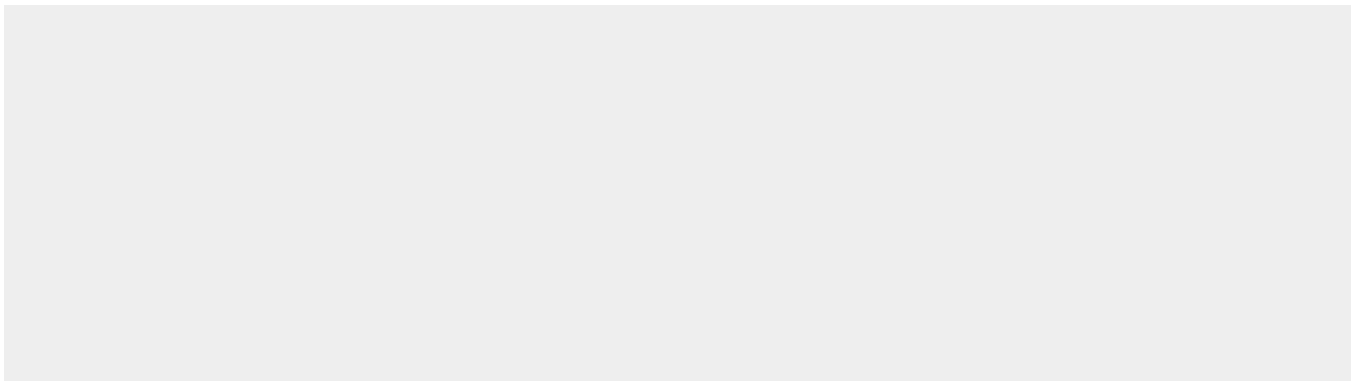
Cellular Location

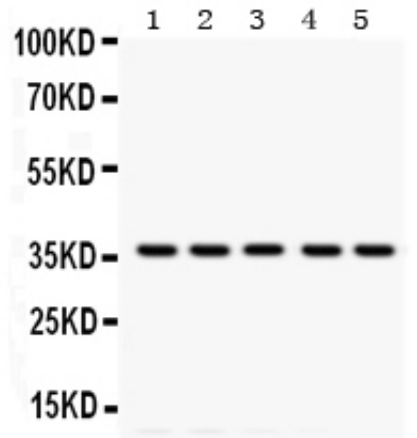
Cytoplasm, cytoskeleton. Note=Associates with F-actin stress fibers (PubMed:7568216).

Anti-Tropomyosin(36kD) Antibody (Monoclonal, TM228) - 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](#)

Anti-Tropomyosin(36kD) Antibody (Monoclonal, TM228) - Images



Western blot analysis of Tropomyosin(36kDa) expression in rat skeletal muscle extract (lane 1), rat cardiac muscle extract (lane 2), mouse skeletal muscle extract (lane 3), mouse cardiac muscle extract (lane 4), and HELA whole cell lysates (lane 5). Tropomyosin(36kDa) at 36KD was detected using rabbit anti-Tropomyosin(36kDa) Antigen Affinity purified polyclonal antibody (Catalog # ABO10480) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-Tropomyosin(36kD) Antibody (Monoclonal, TM228) - Background

The tropomyosins are a family of actin filament binding proteins. These proteins were first isolated from skeletal muscle, but later identified in many nonmuscle tissues. Tropomyosins are ubiquitous proteins of 35 to 45 kD associated with the actin filaments of myofibrils and stress fibers. Vertebrates have at least 4 different tropomyosin genes; in humans, they are named TPM1, TPM2, TPM3, and TPM4. Tropomyosins expressed as different isoforms in muscle and non-muscle cells.