

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

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

Application	WB
Primary Accession	<a href="#">P09495</a>
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, -<br>Western blot, 0.5-1 µg/ml, Human, chicken, rabbit<br>

**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 NaN<sub>3</sub> 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:<a href="http://www.uniprot.org/citations/7568216" target="\_blank">7568216</a>). 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).

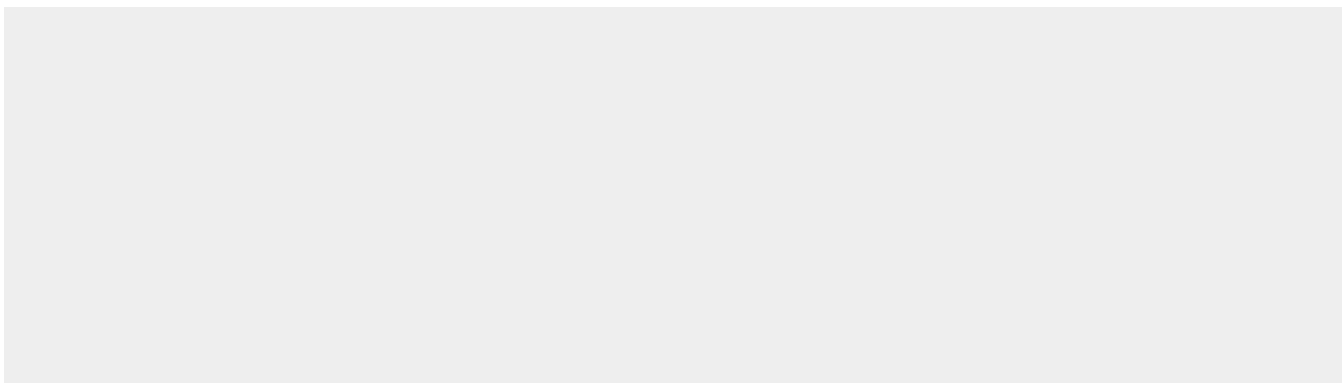
**Cellular Location**

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.