

Anti-Tropomyosin(36/39 kDa) Antibody (Monoclonal, TM31)

Catalog # ABO10479

Product Information

Application	WB
Primary Accession	P04692
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for Tropomyosin (36/39 kDa), tropomyosin 1 (alpha) (TPM1) detection. Tested with WB in Human;mouse;rat;chicken. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Gene ID	24851
Other Names	Tropomyosin alpha-1 chain, Alpha-tropomyosin, Tropomyosin-1, Tpm1, Alpha-tm, Tpma
Calculated MW	32681
Application Details	Western blot, 2-4 µg/ml, Human, mouse, rat, chicken
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.
Source	Eukaryota
Protein Name	Tropomyosin alpha-1 chain
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.
Clone Names	TM31
Immunogen	Chicken gizzard tropomyosin.

Purification	Ascites
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20° C for one year. After reconstitution, 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.

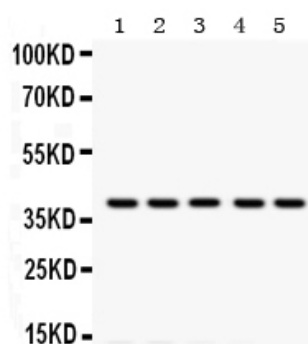
Protein Information

Name	Tpm1
Synonyms	Alpha-tm, Tpma
Function	Binds to actin filaments in muscle and non-muscle cells (PubMed: 22812662 , PubMed: 7568216). Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction (PubMed: 22812662). Smooth muscle contraction is regulated by interaction with caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments.
Cellular Location	Cytoplasm, cytoskeleton. Note=Associates with F-actin stress fibers (PubMed:7568216).

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.

Images



Western blot analysis of Tropomyosin(36/39 kDa) 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(36/39 kDa) at 39KD was detected using rabbit anti-Tropomyosin(36/39 kDa) Antigen Affinity purified polyclonal antibody (Catalog # ABO10479) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method.

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