

## ARG62652 anti-Tropomyosin antibody [TM31]

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [TM-311] recognizes Tropomyosin
Tested Reactivity	Hu, Ms, Rat, Chk, Rb
Tested Application	IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	TM-311
Isotype	IgG1, kappa
Target Name	Tropomyosin
Immunogen	Raised against purified gizzard Tropomyosin of chicken origin.
Conjugation	Un-conjugated
Alternate Names	C15orf13; Tropomyosin alpha-1 chain; TMSA; CMD1Y; HEL-S-265; HTM-alpha; CMH3; Tropomyosin-1; LVNC9; Alpha-tropomyosin

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:50 - 1:100
	WB	1:100 - 1:200

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

**Positive Control** LNCaP cells. Normal prostate or prostate carcinoma

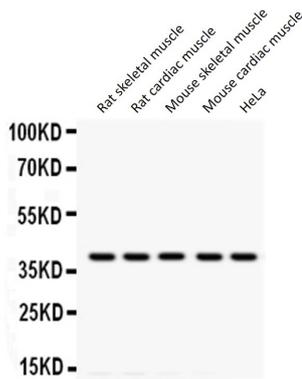
### Properties

Form	Liquid
Purification	Purified Antibody
Buffer	1X PBS and 0.1% Sodium azide
Preservative	0.1% Sodium azide
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Gene Symbol	TPM1
Gene Full Name	tropomyosin 1 (alpha)
Background	This gene is a member of the tropomyosin family of highly conserved, widely distributed actin-binding proteins involved in the contractile system of striated and smooth muscles and the cytoskeleton of non-muscle cells. Tropomyosin is composed of two alpha-helical chains arranged as a coiled-coil. It is polymerized end to end along the two grooves of actin filaments and provides stability to the filaments. The encoded protein is one type of alpha helical chain that forms the predominant tropomyosin of striated muscle, where it also functions in association with the troponin complex to regulate the calcium-dependent interaction of actin and myosin during muscle contraction. In smooth muscle and non-muscle cells, alternatively spliced transcript variants encoding a range of isoforms have been described. Mutations in this gene are associated with type 3 familial hypertrophic cardiomyopathy. [provided by RefSeq, Jul 2008]
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. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Signaling Transduction antibody
Calculated Mw	33 kDa
PTM	Phosphorylated at Ser-283 by DAPK1 in response to oxidative stress and this phosphorylation enhances stress fiber formation in endothelial cells.

## Images



ARG62652 anti-Tropomyosin antibody [TM31] WB image

Western blot: Rat skeletal muscle, Rat cardiac muscle, Mouse skeletal muscle, Mouse cardiac muscle and HeLa whole cell lysates stained with ARG62652 anti-Tropomyosin antibody [TM31] at 0.5  $\mu$ g/ml dilution.