

Tropomyosin, alpha-1 chain (striated muscle) Antibody

Mouse Monoclonal Antibody [Clone TPM1/4510]

Catalog No	Format	Size
7168-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7168-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7168-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

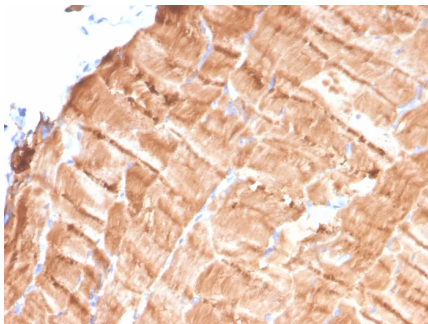
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

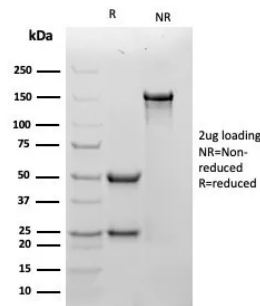
Clone	TPM1/4510
Gene Name	TPM1
Immunogen	Recombinant full-length TPM1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1
Mol. Weight of Antigen	35-45kDa
Cellular Localization	Cytoplasm. Cytoskeleton.
Species Reactivity	Human
Positive Control	Human heart.

*Optimal dilution for a specific application should be determined.

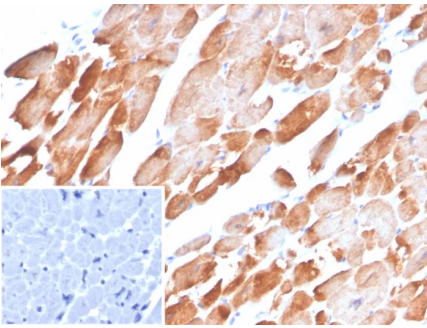
Product Images for Tropomyosin, alpha-1 chain (striated muscle) Antibody



Formalin-fixed, paraffin-embedded human skeletal muscle stained with Tropomyosin Mouse Monoclonal Antibody (TPM1/4510). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified Tropomyosin Mouse Monoclonal Antibody (TPM1/4510). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human heart stained with Tropomyosin Mouse Monoclonal Antibody (TPM1/4510). Inset: PBS instead of primary antibody; secondary only negative control.

Specificity & Comments

Tropomyosins are a group of structural proteins. Tropomyosins are present in virtually all eukaryotic cells, both muscle and non-muscle, where they bind actin filaments and function to modulate Actin-myosin interaction and stabilize actin filament structure. Tropomyosin α is encoded by the TPM1 gene, which maps to human chromosome 15q22.2 and undergoes alternative splicing to generate at least four isoforms, including skeletal muscle (isoform 1), smooth muscle (isoform 2), fibroblast/TM3 (isoform 3) and isoform 4. Tropomyosin β is encoded by the TPM2 gene, which maps to human chromosome 9p13.3 and undergoes alternative splicing to generate three isoforms, including skeletal muscle (isoform 1), non-muscle/fibroblast TM36/epithelial TMe1 (isoform 2) and non-muscle (isoform 3). Troponin I binds Tropomyosin at a specific region and the association of Tropomyosin-Troponin with actin filaments may increase the rigidity of actin filaments. Tropomyosin also interacts with caldesmon to regulate smooth muscle contraction.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular