

# Tropomyosin 1 Conjugated Antibody

Catalog No: #C49942

Package Size: #C49942-AF350 100ul #C49942-AF405 100ul #C49942-AF488 100ul

#C49942-AF555 100ul #C49942-AF594 100ul #C49942-AF647 100ul

#C49942-AF680 100ul #C49942-AF750 100ul #C49942-Biotin 100ul

Orders: order@signalwayantibody.com

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## Description

Product Name	Tropomyosin 1 Conjugated Antibody
Host Species	Rabbit
Clonality	Monoclonal
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Recombinant protein within human Tropomyosin 1 aa 100-300.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	AA986836 antibody AI854628 antibody Alpha tropomyosin antibody alpha-TM antibody Alpha-tropomyosin antibody C15orf13 antibody cardiomyopathy, hypertrophic 3 antibody CMD1Y antibody CMH3 antibody HTM alpha antibody HTM-alpha antibody OTTHUMP00000163688 antibody sarcomeric tropomyosin kappa antibody TM2 antibody Tmpa antibody TMSA antibody Tpm-1 antibody TPM1 antibody TPM1_HUMAN antibody tropomyosin 1 (alpha) antibody tropomyosin 1 (alpha) isoform 1 antibody tropomyosin 1 (alpha) isoform 2 antibody tropomyosin 1 (alpha) isoform 3 antibody tropomyosin 1 (alpha) isoform 4 antibody tropomyosin 1 (alpha) isoform 5 antibody tropomyosin 1 (alpha) isoform 6 antibody tropomyosin 1 (alpha) isoform 7 antibody Tropomyosin 1 antibody Tropomyosin alpha 1 chain antibody Tropomyosin alpha-1 chain antibody Tropomyosin, skeletal muscle alpha antibody Tropomyosin-1 antibody
Accession No.	Swiss-Prot#:P09493
Uniprot	P09493
GeneID	7168;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	33 kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

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## Background

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  $\alpha$  is encoded by the TPM1 gene, which maps to human chromosome 15q22.1 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  $\beta$  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.

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Note: This product is for in vitro research use only