

Product Name: KD-Validated Tropomyosin 1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb00869

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000
Molecular Weight	Calculated MW: 32.7kDa

Antigen Information

Gene Name	TPM1
Alternative Names	TPM1; Tropomyosin 1; C15orf13; Cardiomyopathy, Hypertrophic 3; Tropomyosin Alpha-1 Chain; CMH3; TMSA; Chromosome 15 Open Reading Frame 13; Epididymis Secretory Protein Li 265; Sarcomeric Tropomyosin Kappa; Tropomyosin 1 (Alpha); Alpha-Tropomyosin; Tropomyosin-1; HEL-S-265; HTM-Alpha; CMD1Y; LVNC9
Gene ID	7168.0
SwissProt ID	P09493
Immunogen	A synthesized peptide derived from human Tropomyosin 1

Background

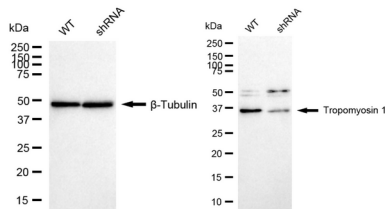
This gene is a member of the tropomyosin family of highly conserved, widely distributed actin-binding proteins involved in the

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 and dilated cardiomyopathy 1Y. [provided by RefSeq, Jun 2022]

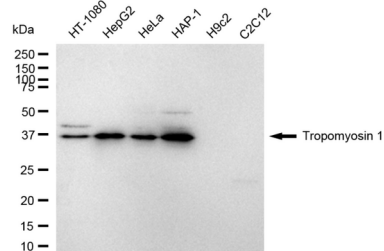
Research Area

Signal Transduction, Cardiovascular

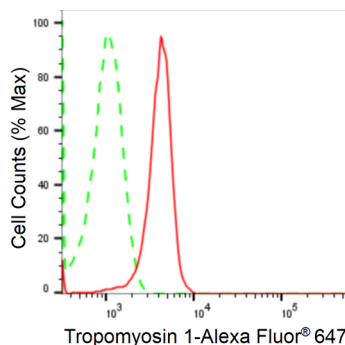
Image Data



Western blotting analysis using Tropomyosin 1 antibody (KVA00869). Tropomyosin 1 expression in wild type (WT) and Tropomyosin 1 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with Tropomyosin 1 antibody (KVA00869, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Tropomyosin 1 antibody (KVA00869). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Tropomyosin 1 antibody (KVA00869, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Flow cytometric analysis of Tropomyosin 1 expression in HepG2 cells using Tropomyosin 1 antibody (KVA00869, 1:2,000). Green, isotype control; red, Tropomyosin 1.