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KD-Validated Anti-Tropomyosin 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1732

Specification

KD-Validated Anti-Tropomyosin 1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P09493
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 33 kDa , observed , 36 kDa KDa**
Gene Name	**TPM1**
Aliases	**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**
Immunogen	**A synthesized peptide derived from human Tropomyosin 1**

KD-Validated Anti-Tropomyosin 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID **7168**

Other Names
Tropomyosin alpha-1 chain, Alpha-tropomyosin, Tropomyosin-1, TPM1, C15orf13, TMSA

KD-Validated Anti-Tropomyosin 1 Rabbit Monoclonal Antibody - Protein Information

Name TPM1

Synonyms C15orf13, TMSA

Function
Binds to actin filaments in muscle and non-muscle cells (PubMed:23170982). Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction (PubMed:23170982). Smooth muscle contraction is regulated by interaction with caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments.

Cellular Location
Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P04692}. Note=Associates with F-actin stress

fibers. {ECO:0000250|UniProtKB:P04692}

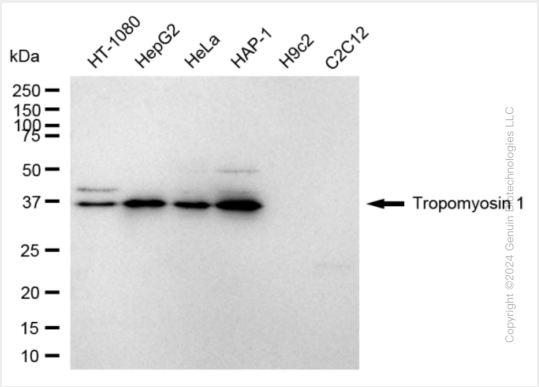
Tissue Location
Detected in primary breast cancer tissues but undetectable in normal breast tissues in Sudanese patients. Isoform 1 is expressed in adult and fetal skeletal muscle and cardiac tissues, with higher expression levels in the cardiac tissues. Isoform 10 is expressed in adult and fetal cardiac tissues, but not in skeletal muscle. {ECO:0000269|PubMed:15249230, ECO:0000269|Ref.15}

KD-Validated Anti-Tropomyosin 1 Rabbit Monoclonal Antibody - Protocols

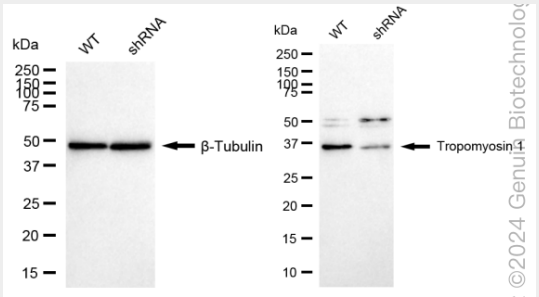
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Tropomyosin 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Tropomyosin 1 antibody (Cat#AGI1732). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Tropomyosin 1 antibody (Cat#AGI1732, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Tropomyosin 1 antibody (Cat#AGI1732). Tropomyosin 1 expression in wild type (WT) and Tropomyosin 1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Tropomyosin 1 antibody (Cat#AGI1732, 1:5,000) and HRP-conjugated goat anti-rabbit

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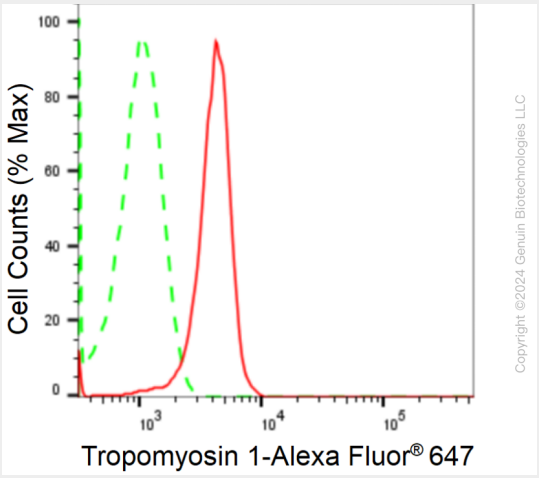
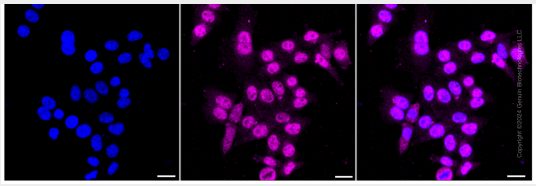
secondary antibody respectively.



Flow cytometric analysis of Tropomyosin 1 expression in HepG2 cells using anti-Tropomyosin 1 antibody (Cat#AGI1732, 1:2,000). Green, isotype control; red, Tropomyosin 1.



Immunocytochemical staining of HepG2 cells with anti-Tropomyosin 1 antibody (Cat#AGI1732, 1:1,000). Nuclei were stained blue with DAPI; Tropomyosin 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.