

# PRODUCT DATA SHEET

Bioworld Technology,Inc.

# **Tropomyosin 1 polyclonal antibody**

Catalog: BS91377 Host: Rabbit Reactivity: Human, Mouse, Rat

#### **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 α 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.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

#### **Molecular Weight:**

33 kDa

### **Swiss-Prot:**

P09493(Human) P58771(Mouse) P04692(Rat)

## **Purification&Purity:**

ProA affinity purified

## **Applications:**

WB:1:500-1:2,000 IHC:1:50-1:200 FC:1:50-1:100

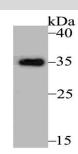
## **Storage&Stability:**

Store at +4  $^{\circ}$ C after thawing. Aliquot store at -20  $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

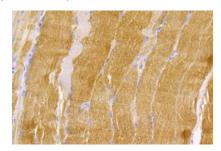
# **Specificity:**

Tropomyosin 1 polyclonal antibody detects endogenous levels of Tropomyosin 1 protein.

#### **DATA:**



Western blot analysis of Tropomyosin 1 on rat heart tissue using anti-Tropomyosin 1 antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded rat smooth muscle tissue using anti-Tropomyosin 1 antibody. Counter stained with hematoxylin.

## Note:

For research use only, not for use in diagnostic procedure.

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