abcam

Product datasheet

Anti-Tropomyosin 1 (alpha) antibody [EPR5158] ab109505

重组 RabMAb

2 References 7 图像

概述

产品名称	Anti-Tropomyosin 1 (alpha)**抗体**[EPR5158]
描述	**兔单克隆抗体**[EPR5158] to Tropomyosin 1 (alpha)
宿主	Rabbit
经测试应用	**适用于:** WB, IHC-P
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Human heart, Mouse heart, and Rat heart tissue lysates, and Recombinant Human TMP1 protein. IHC-P: Human cardiac muscle, Rat cardiac muscle, Mouse cardiac muscle, and Human prostatic hyperplasia tissues.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
纯度	Protein A purified
克隆	**单克隆**
克隆编号	EPR5158

同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab109505于以下的经测试应用**

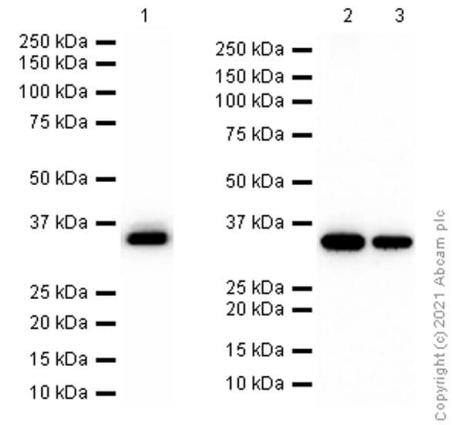
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000 - 1/10000. Predicted molecular weight: 33 kDa.
IHC-P		1/500 - 1/1000. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. Heat up to 98 degrees C, below boiling, and then let cool for 10-20 min.

靶标

功能	Binds to actin filaments in muscle and non-muscle cells. Plays a central role, in association with the troponin complex, in the calcium dependent regulation of vertebrate striated muscle contraction. Smooth muscle contraction is regulated by interaction with caldesmon. In non-muscle cells is implicated in stabilizing cytoskeleton actin filaments.
组织特异性	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.
疾病相关	Defects in TPM1 are the cause of cardiomyopathy familial hypertrophic type 3 (CMH3) [MIM:115196]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms include dyspnea, syncope, collapse, palpitations, and chest pain. They can be readily provoked by exercise. The disorder has inter- and intrafamilial variability ranging from benign to malignant forms with high risk of cardiac failure and sudden cardiac death. Defects in TPM1 are the cause of cardiomyopathy dilated type 1Y (CMD1Y) [MIM:611878]. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.
序列相似性	Belongs to the tropomyosin family.
结构域	The molecule is in a coiled coil structure that is formed by 2 polypeptide chains. The sequence exhibits a prominent seven-residues periodicity.
细胞定位	Cytoplasm > cytoskeleton.

图片



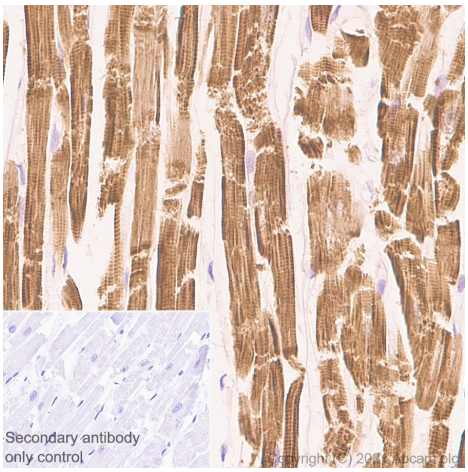
Western blot - Anti-Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505)

All lanes : Anti-Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505) at 1/1000 dilution (Purified)

Lane 1 : Human heart lysate at 15 µg
Lane 2 : Mouse heart lysate at 20 µg
Lane 3 : Rat heart lysate at 20 µg

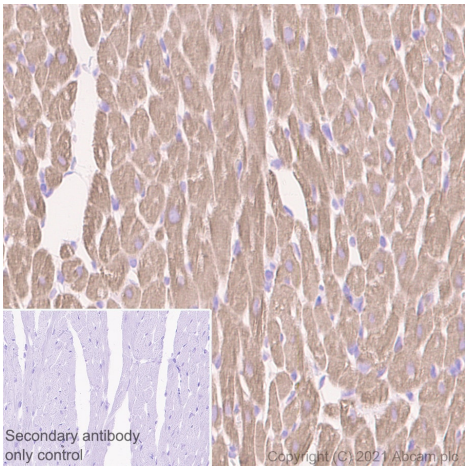
Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 33 kDa
Observed band size: 33 kDa



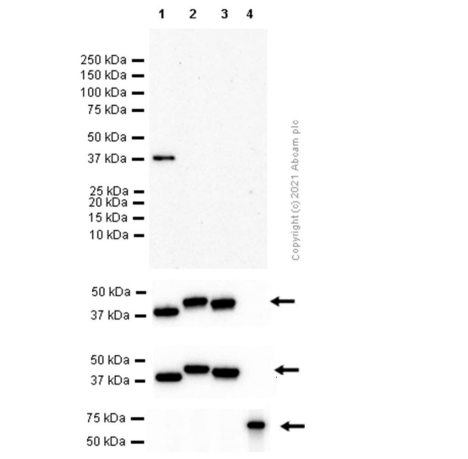
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cardiac muscle tissue sections labeling Tropomyosin 1 (alpha) with purified ab109505 at 1:600 (0.343 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cardiac muscle tissue sections labeling Tropomyosin 1 (alpha) with purified ab109505 at 1:600 (0.343 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505)

All lanes : Anti-Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505) at 1/1000 dilution

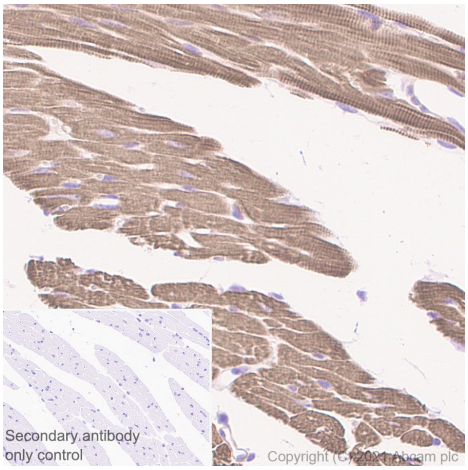
Lane 1 : MYC and DDK-tagged Recombinant Human TPM1 protein (Full length)
Lane 2 : MYC and DDK-tagged Recombinant Human TPM2 protein (Full length)
Lane 3 : MYC and DDK-tagged Recombinant Human TPM3 protein (Full length)
Lane 4 : GST-tagged Recombinant Human TPM4 protein (Full length)

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 33 kDa
Observed band size: 37 kDa

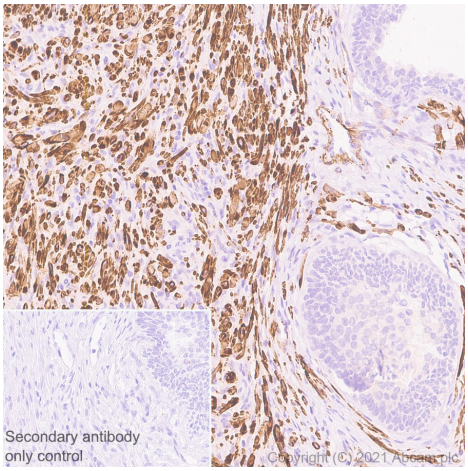
Exposure time: 60 seconds

Blocking and Diluting buffer and concentration: 5% NFDM/TBST



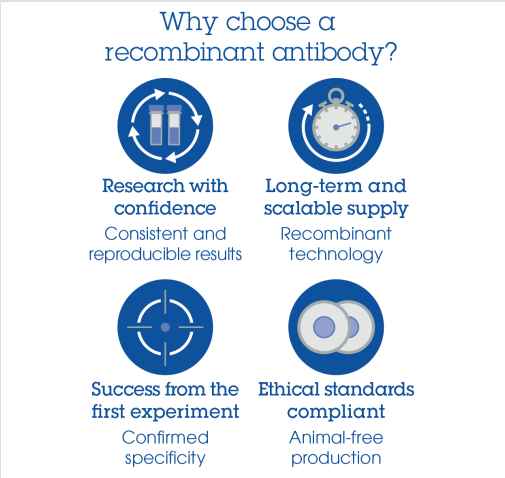
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cardiac muscle tissue sections labeling Tropomyosin 1 (alpha) with purified ab109505 at 1:600 (0.343 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human prostatic hyperplasia tissue sections labeling Tropomyosin 1 (alpha) with purified ab109505 at 1:600 (0.343 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Anti-Tropomyosin 1 (alpha) antibody [EPR5158]

(ab109505)

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