

Product datasheet

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

**重组 RabMAB**

1 References 4 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)
经测试应用	适用于: WB, IHC-P, Flow Cyt 不适用于: ICC or IP
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide (Human)
阳性对照	WB: lysate from Human heart or skeletal muscle; HT-1080 cell lysate. IHC-P: Human muscle tissue (skeletal, heart and smooth).
常规说明	This product is a recombinant rabbit monoclonal antibody.  Our RabMAB <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMab<sup>®</sup> patents</a>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%
纯度	Tissue culture supernatant
克隆	单克隆
克隆编号	EPR5158
同种型	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab109505** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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.
Flow Cyt		1/10 - 1/100. <a href="#">ab172730</a> -Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

**应用说明** Is unsuitable for ICC or IP.

## 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.

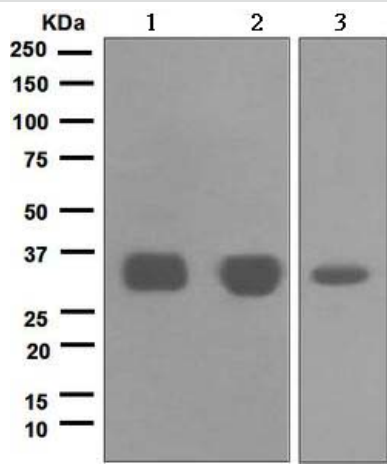
**疾病相关** Defects in TPM1 are the cause of cardiomyopathy familial hypertrophic type 3 (CMH3) [MIM:115196]. Familial hypertrophic cardiomyopathy is a hereditary heart disorder characterized by ventricular hypertrophy, which is usually asymmetric and often involves the interventricular septum. The symptoms 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.

## Anti-Tropomyosin 1 (alpha) antibody [EPR5158] 图像



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

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

**Lane 1** : Human heart lysate

**Lane 2** : Human skeletal muscle lysate

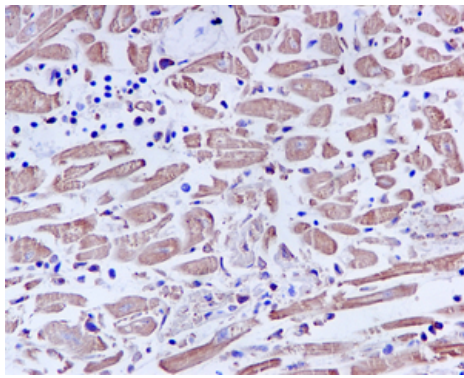
**Lane 3** : HT-1080 cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

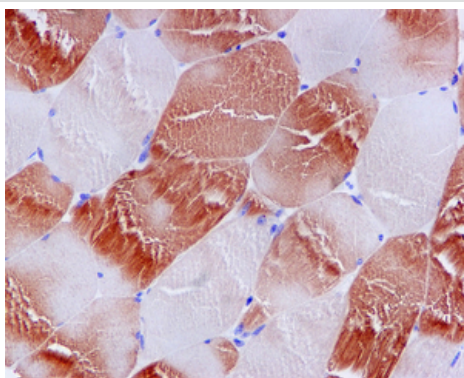
Standard HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size** : 33 kDa



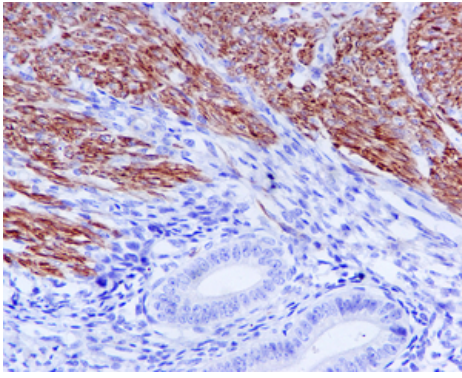
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Tropomyosin 1 (alpha) antibody [EPR5158] (ab109505)

Immunohistochemical analysis of paraffin-embedded Human heart muscle tissue using ab109505 at 1/500



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

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue using ab109505 at 1/500



Immunohistochemical analysis of paraffin-embedded Human smooth muscle tissue using ab109505 at 1/500

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

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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