# abcam

## Product datasheet

## Anti-Hsp27 antibody [EP1724Y] ab62339





重组 RabMAb

### 12 References 5 图像

#### 概述

产品名称 Anti-Hsp27抗体[EP1724Y]

描述 兔单克隆抗体[EP1724Y] to Hsp27

宿主 Rabbit

经测试应用 适用于: WB, IHC-P

不适用于: Flow Cyt or IP

种属反应性 与反应: Human

免疫原 Synthetic peptide within Human Hsp27 (N terminal). The exact sequence is proprietary.

阳性对照 WB: HeLa, HAP1 and MCF7 cell lysates. IHC-P: Human cervical carcinoma and human breast

carcinoma 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.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### 性能

形式

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

存储溶液 pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

纯度 Protein A purified

**克隆** 单克隆

**克隆编号** EP1724Y

**同种型** IgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab62339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		1/500 - 1/2000. Detects a band of approximately 23 kDa (predicted molecular weight: 23 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

应用说明

Is unsuitable for Flow Cyt or IP.

#### 靶标

功能

组织特异性

疾病相关

Involved in stress resistance and actin organization.

Detected in all tissues tested: skeletal muscle, heart, aorta, large intestine, small intestine, stomach, esophagus, bladder, adrenal gland, thyroid, pancreas, testis, adipose tissue, kidney, liver, spleen, cerebral cortex, blood serum and cerebrospinal fluid. Highest levels are found in the heart and in tissues composed of striated and smooth muscle.

Defects in HSPB1 are the cause of Charcot-Marie-Tooth disease type 2F (CMT2F) [MIM:606595]. CMT2F is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Neuropathies of the CMT2 group are characterized by signs of axonal regeneration in the absence of obvious myelin alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy. Nerve conduction velocities are normal or slightly reduced. CMT2F onset is between 15 and 25 years with muscle weakness and atrophy usually beginning in feet and legs (peroneal distribution). Upper limb involvement occurs later. CMT2F inheritance is autosomal dominant.

Defects in HSPB1 are a cause of distal hereditary motor neuronopathy type 2B (HMN2B) [MIM:608634]. Distal hereditary motor neuronopathies constitute a heterogeneous group of neuromuscular disorders caused by selective impairment of motor neurons in the anterior horn of the spinal cord, without sensory deficit in the posterior horn. The overall clinical picture consists of a classical distal muscular atrophy syndrome in the legs without clinical sensory loss. The disease starts with weakness and wasting of distal muscles of the anterior tibial and peroneal compartments of the legs. Later on, weakness and atrophy may expand to the proximal muscles of the lower limbs and/or to the distal upper limbs.

Belongs to the small heat shock protein (HSP20) family.

Phosphorylated in MCF-7 cells on exposure to protein kinase C activators and heat shock.

Cytoplasm. Nucleus. Cytoplasm > cytoskeleton > spindle. Cytoplasmic in interphase cells.

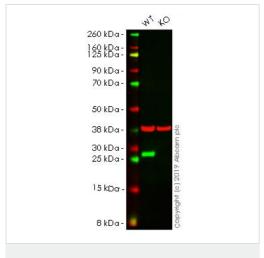
细胞定位

序列相似性

翻译后修饰

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#### 图片



Western blot - Anti-Hsp27 antibody [EP1724Y] (ab62339)

**All lanes :** Anti-Hsp27 antibody [EP1724Y] (ab62339) at 1/500 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: HSPB1 knockout HeLa cell lysate

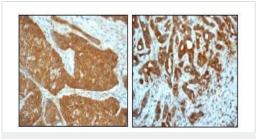
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 23 kDa Observed band size: 23 kDa

**Lanes 1-2:** Merged signal (red and green). Green - ab62339 observed at 23 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) observed at 37 kDa.

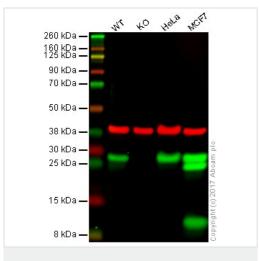
ab62339 was shown to react with Hsp27 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab261738 (knockout cell lysate ab256945) was used. Wild-type HeLa and HSPB1 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab62339 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) overnight at 4°C at a 1 in 500 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Hsp27 antibody
[EP1724Y] (ab62339)

Immunohistochemical analysis of Hsp27 expression in paraffin embedded human cervical carcinoma (left) and human breast carcinoma (right) using 1/100 ab62339

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-Hsp27 antibody [EP1724Y] (ab62339)

**All lanes :** Anti-Hsp27 antibody [EP1724Y] (ab62339) at 1/500 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: Hsp27 knockout HAP1 whole cell lysate

Lane 3 : HeLa whole cell lysate

Lane 4 : MCF7 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 23 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab62339 observed at 27 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab62339 was shown to specifically react with Hsp27 in wild-type HAP1 cells. No band was observed when Hsp27 knockout samples were used. Wild-type and Hsp27 knockout samples were subjected to SDS-PAGE. Ab62339 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

100-75-50-37-25-20-15-10-Western blot - Anti-Hsp27 antibody [EP1724Y]

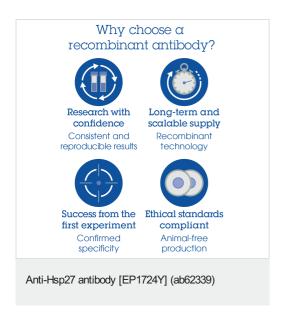
(ab62339)

Anti-Hsp27 antibody [EP1724Y] (ab62339) at 1/500 dilution + HeLa cell lysate at 10  $\mu g$ 

#### **Secondary**

Goat anti-rabbit, HRP labeled at 1/2000 dilution

Predicted band size: 23 kDa Observed band size: 27 kDa



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