# abcam

### **Product datasheet**

## Anti-Hsp27 antibody [EP1724Y] ab62339

КО 評価済 มาวงชาวง RabMAb

12 References 画像数 5

#### 製品の概要

製品名	Anti-Hsp27 antibody [EP1724Y]	
製品の詳細	Rabbit monoclonal [EP1724Y] to Hsp27	
由来種	Rabbit	
アプリケーション	適用あり: WB, IHC-P 適用なし: Flow Cyt or IP	
種交差性	交差種: Human	
免疫原	Synthetic peptide within Human Hsp27 (N terminal). The exact sequence is proprietary.	
ポジティブ・コントロール	WB: HeLa, HAP1 and MCF7 cell lysates. IHC-P: Human cervical carcinoma and human breast carcinoma tissues.	
特記事項	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> <li>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</li> </ul>	

製品の特性	
製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
パッファー	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
精製度	Protein A purified

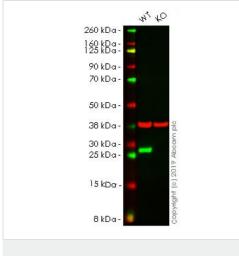
ポリ/モノ	モノクローナル
クローン名	EP1724Y
アイソタイプ	lgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab62339の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項		
WB		1/500 - 1/2000. Detects a band of approximately 23 kDa (predicted molecular weight: 23 kDa).		
ІНС-Р		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.		
追加情報	Is unsuitable for Flow Cyt or IP.			
ターゲット情報				
機能	Involved in stress resistance and actin organization.			
組織特異性	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.			
関連疾患	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.			
配列類似性	Belongs to the small heat sho	ck protein (HSP20) family.		
翻訳後修飾	Phosphorylated in MCF-7 cel	Phosphorylated in MCF-7 cells on exposure to protein kinase C activators and heat shock.		
細胞内局在	Cytoplasm. Nucleus. Cytoplas	Cytoplasm. Nucleus. Cytoplasm > cytoskeleton > spindle. Cytoplasmic in interphase cells.		

#### 画像



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

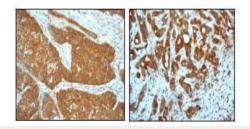
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

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

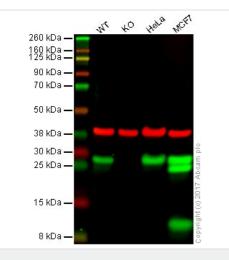
Lanes 1-2: Merged signal (red and green). Green - ab62339 observed at 23 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) observed at 37 kDa.

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 IgG H&L (IRDye<sup>®</sup>680RD) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup>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

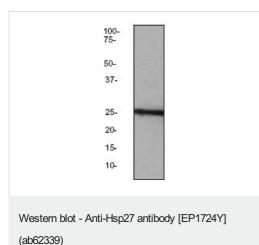
Lane 1 : Wild-type HAP1 whole cell lysate Lane 2 : Hsp27 knockout HAP1 whole cell lysate Lane 3 : HeLa whole cell lysate Lane 4 : MCF7 whole cell lysate

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, <u>ab8245</u>, 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 <u>ab8245</u> (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<sup>®</sup> 800CW) preabsorbed <u>ab216773</u> and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed <u>ab216776</u> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

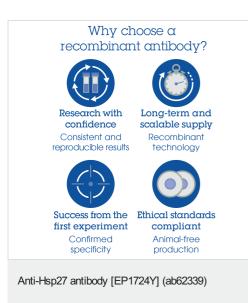


Anti-Hsp27 antibody [EP1724Y] (ab62339) at 1/500 dilution + HeLa cell lysate at 10  $\mu g$ 

#### Secondary

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

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



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