Product datasheet

Anti-Hsp27 (phospho S82) antibody ab90537

Overview

Product name: Anti-Hsp27 (phospho S82) antibody
Description: Rabbit polyclonal to Hsp27 (phospho S82)
Host species: Rabbit
Tested applications: Suitable for: WB, IP, ICC/IF, IHC-P
Species reactivity: Reacts with: Mouse, Rat, Sheep, Chicken, Guinea pig, Cow, Dog, Human
Immunogen: Synthetic phosphopeptide from a region around serine 82 (Human) conjugated to KLH
Positive control: Heat shocked HeLa cells; phosphorylated Hsp27 protein. This antibody gave a positive result in IHC in the following FFPE tissue: Human skeletal muscle.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
Storage buffer: Constituent: Whole serum
Purity: Whole antiserum
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab90537 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<tr>
<th>Application</th>
<th>Abreviars</th>
<th>Notes</th>
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<tr>
<td>IP</td>
<td>1/100.</td>
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<tr>
<td>ICC/IF</td>
<td>Use at an assay dependent concentration.</td>
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**Function**
Involved in stress resistance and actin organization.

**Tissue specificity**
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.

**Involvement in disease**
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.

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

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

**Cellular localization**

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**IHC-P**
1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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**Target**

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**Images**
**Western blot** - Anti-Hsp27 (phospho S82) antibody (ab90537)

**All lanes**: Anti-Hsp27 (phospho S82) antibody (ab90537) at 1/2000 dilution

**Lane 1**: phosphorylated Hsp27 protein

**Lane 2**: Non-phosphorylated Hsp27 protein

**Predicted band size**: 23 kDa

IHC image of Hsp27 (phospho S82) staining in Human skeletal muscle formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab90537, 1/200 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.
ab90537 staining Hsp27 in HeLa cells by Confocal Immunofluorescence (green). Nuclei are stained in blue pseudocolor using DRAQ5.

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