

### **Hsp27 Antibody**

Rabbit mAb Catalog # AP90933

#### **Specification**

### **Hsp27 Antibody - Product Information**

Application WB, IHC, FC, ICC, IP

Primary Accession P04792
Reactivity Rat

Clonality Monoclonal

**Other Names** 

28 kDa heat shock protein; Estrogen-regulated 24 kDa protein; Growth-related 25 kDa protein;

Heat shock 27 kDa protein; HSP 27; HSP25; HSPB1; P25; SRP27;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 22783 Da

## **Hsp27 Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Hsp27

Description Heat shock protein (HSP) 27 is one of the

small HSPs that are constitutively

expressed at different levels in various cell types and tissues. Like other small HSPs,

**HSP27** is regulated at both the

transcriptional and posttranslational levels. In response to stress, the HSP27 expression increases several-fold to confer

cellular resistance to the adverse environmental change. HSP27 is

phosphorylated at Ser15, Ser78, and Ser82 by MAPKAPK-2 as a result of the activation

of the p38 MAP kinase pathway.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

#### **Hsp27 Antibody - Protein Information**

Name HSPB1

Synonyms HSP27, HSP28

**Function** 



Small heat shock protein which functions as a molecular chaperone probably maintaining denatured proteins in a folding- competent state (PubMed: <a

 $href="http://www.uniprot.org/citations/10383393" target="\_blank">10383393</a>, PubMed:<a href="http://www.uniprot.org/citations/20178975" target="_blank">20178975</a>). Plays a role in stress resistance and actin organization (PubMed:<a$ 

href="http://www.uniprot.org/citations/19166925" target="\_blank">19166925</a>). Through its molecular chaperone activity may regulate numerous biological processes including the phosphorylation and the axonal transport of neurofilament proteins (PubMed:<a href="http://www.uniprot.org/citations/23728742" target="blank">23728742</a>).

#### **Cellular Location**

Cytoplasm. Nucleus Cytoplasm, cytoskeleton, spindle Note=Cytoplasmic in interphase cells. Colocalizes with mitotic spindles in mitotic cells. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.

#### **Tissue Location**

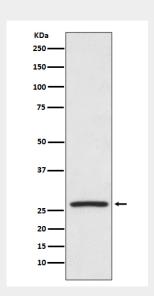
Detected in all tissues tested: skeletal muscle, heart, aorta, large intestine, small intestine, stomach, esophagus, bladder, adrenal gland, thyroid, pancreas, testis, adipose tissue, kidney, liver, spleen, cerebral cortex, blood serum and cerebrospinal fluid. Highest levels are found in the heart and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

# **Hsp27 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

#### Hsp27 Antibody - Images



Western blot analysis of Hsp27 expression in HeLa cell lysate.