

**HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone HSPB1/774 ]**  
**Catalog # AH11459****Specification****HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide - Product Information**

Application	WB, IHC, IF, FC
Primary Accession	<a href="#">P04792</a>
Other Accession	<a href="#">3315</a> , <a href="#">520973</a>
Reactivity	Human, Mouse, Rat, Chicken, Chimpanzee, Sheep
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	27kDa KDa

**HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide - Additional Information****Gene ID** 3315**Other Names**

Heat shock protein beta-1, HspB1, 28 kDa heat shock protein, Estrogen-regulated 24 kDa protein, Heat shock 27 kDa protein, HSP 27, Stress-responsive protein 27, SRP27, HSPB1, HSP27, HSP28

**Application Note**

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC">IHC~~1:100~500</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_FC">FC~~1:10~50</span>

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide - 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

[19166925](http://www.uniprot.org/citations/19166925)). Through its molecular chaperone activity may regulate numerous biological processes including the phosphorylation and the axonal transport of neurofilament proteins (PubMed:[23728742](http://www.uniprot.org/citations/23728742)).

#### **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**

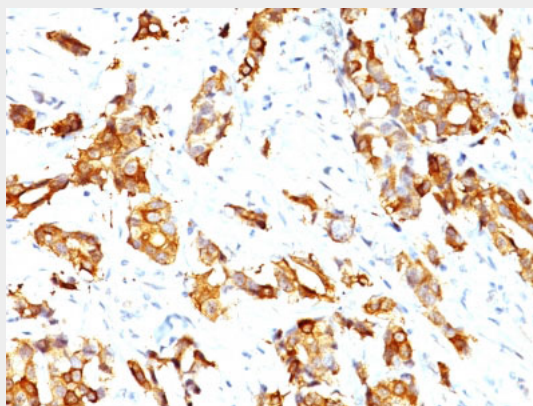
Detected in all tissues tested: skeletal muscle, heart, aorta, large intestine, small intestine, stomach, esophagus, bladder, adrenal gland, thyroid, pancreas, testis, adipose tissue, kidney, liver, spleen, cerebral cortex, blood serum and cerebrospinal fluid. Highest levels are found in the heart and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

### **HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide - Protocols**

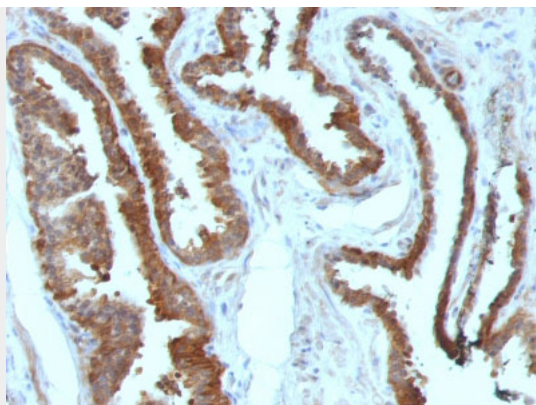
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide - Images**



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with HSP27 Monoclonal Antibody (HSPB1/774)



Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with HSP27 Monoclonal Antibody (HSPB1/774)

#### **HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide - Background**

It recognizes a 24-27kDa estrogen-regulated protein, identified as heat shock protein 27 (hsp27). Hsp27 was recently found to be identical to the estrogen-induced  $\diamond$ p29 $\diamond$  and  $\diamond$ 24K $\diamond$  protein. About 50% of breast carcinomas are positive for hsp27 especially those that are also positive for estrogen and/or progesterone receptor. HSP27 has also been implicated in drug resistance in cancer cells.

#### **HSP27 (Heat Shock Protein 27) Antibody - With BSA and Azide - References**

Georgopoulos, C. and Welch, W.J. 1993. Role of the major heat shock proteins as molecular chaperones. *Annu. Rev. Cell Biol.* 9: 601-634