

Anti-HSP27 Antibody

Mouse monoclonal antibody to HSP27 Catalog # AP61590

Specification

Anti-HSP27 Antibody - Product Information

Application	WB, IHC
Primary Accession	<u>P04792</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	22783

Anti-HSP27 Antibody - Additional Information

Gene ID 3315

Other Names HSP27; HSP28; 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

Target/Specificity Recognizes endogenous levels of HSP27 protein.

Dilution WB~~WB (1/1000 - 1/2000), IH (1/100 - 1/200) IHC~~1:100~500

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-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:10383393, PubMed:20178975). Plays a role in stress resistance and actin organization (PubMed:19166925). Through its



molecular chaperone activity may regulate numerous biological processes including the phosphorylation and the axonal transport of neurofilament proteins (PubMed: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.

Anti-HSP27 Antibody - Protocols

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

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

Anti-HSP27 Antibody - Images



Western blot analysis of HSP27 expression in Hela (A) whole cell lysates.





Immunohistochemical analysis of HSP27 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody 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.

Anti-HSP27 Antibody - Background

Recombinant protein corresponding to human HSP27.