

Phospho-Hsp27 (S82) Antibody Rabbit mAb Catalog # AP90704

Specification

Phospho-Hsp27 (S82) Antibody - Product Information

ApplicationWB, IPPrimary AccessionP04792ReactivityRatClonalityMonoclonalOther Names28 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; Stress-responsive protein 27;

lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	22783 Da

Phospho-Hsp27 (S82) Antibody - Additional Information

Dilution	WB~~1:1000 IP~~N/A
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human Phospho-Hsp27 (S82)
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 , 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.

Phospho-Hsp27 (S82) 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.

Phospho-Hsp27 (S82) Antibody - Protocols

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

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

Phospho-Hsp27 (S82) Antibody - Images





Western blot analysis of Phospho-Hsp27 (S82) expression in HeLa cell lysate treated with heat shock.